AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 54 WALL STREET, NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. V., No. 6.] SATURDAY, FEBRUARY 10, 1849. [WHOLE No. 669, VOL. XXII.

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Saturday, February 10, 1849.

St. Lawrence and Atlantic Railway.

We take pleasure in announcing the appointment Mr. GZOWSKI, (recently engaged on the public works in Canada) as Engineer of the St. Lawrence and Atlantic Railroad Co. We are gratified to learn from Mr. GZOWSKI, whom we had the good fortune to meet in New York, the present week, that the necessary arrangements are going on to definitely locate the whole line of the road between Montreal and Portland as soon as may be, and carry the work forward to completion.

At the organization of the two companies in Maine and Canada, A. C. MORTON, Esq., was made Chief Superintending Engineer over the whole line, with a view to the adoption of an uniform system of construction and management. An agreement was entered into, establishing the guage of *five feet six inches*, and providing for a joint operation of the two roads when completed, make the two companies, to all intents and purposes, one.

In April last Mr. Morton resigned this joint charge, on account of ill-health, produced mainly from over-exertion in superintending the surveys and locations over this long line, and retained his position as Chief Engineer of the Portland Company only. He was urged by the Canadian Company to take the entire charge of their work, but preferred remaining at Portland. The Canadian Company have gone on the past season without a Chief Engineer until the recent appointment of Mr. Gzowski. We learn from him that the prospect of a speedy location of the entire line is favorable, that the chief engineers of the two companies have compared notes on the previous surveys, and that the most entire harmony of opinion exists in regard to the general progress of the work, and the carrying out of the previous plans of the two companies. We congratulate the friends of this great *international railway* upon their flattering prospects of success. If the proposed aid is granted by the Parliament of Canada, in regard to which there seems to be no doubt, this whole line can be finished in a comparatively brief period. It is the measure of all others to preserve to Montreal the continuance of her prosperity and her business.

To Railroad Companies and others.

We propose to enlarge our paper by increasing the number of pages. We hope to advertise the running of every railroad in the country and Canada, also the sailing of packets and steam vessels.—By this means the Journal will be a full travelling directory for the Union. In that case we shall issue quarterly an extra, giving tables of distances and fare on each line, and a railroad map. A copy of this extra we will then place in every depot and station in the country. The plan, so far, meets universal favor.

The Hon. Mr. HOLMES, of Montreal, has given notice of a motion to be introduced into Parliament to inquire if the ministry have taken all needful measures to protect the navigation of Lake Champlain and the Richlieu River, in accordance with the treaties now existing between Great Britain and the United States.

☞ Subscribers to the Journal desiring information in regard to Railroad Companies, the value of stocks, the names of agents, superintendents, or other officers, can probably be supplied by calling on the Editor.

Reciprocity Bill in Canada.

The *Hon. Mr. Merritt*, the father of the Welland Canal, has introduced a bill into the Parliament of Canada, for the enactment of a Reciprocity Bill, in terms similar to the one pending before Congress

The bill introduced by Mr Grinnell into Congress, on behalf of the Committee on Commerce, is as follows:—

"A BILL.

To admit certain articles of the growth or production of Canada into the United States free of duty upon the condition that the like articles of the growth or production of the United States are admitted into Canada free of duty.

"*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That when the President of the United States shall issue his proclamation that the articles hereinafter enumerated, being of the growth or production of the United States, are admitted into the province of Canada by law free of duty, that on and after that day, the like articles, being of the growth or production of said province of Canada, shall be admitted into the United States free of duty, when imported direct from said province, so long as the said enumerated articles are admitted into said province of Canada from the United States free of duty, unless otherwise directed by Congress, to wit: Grain and breadstuffs of all kinds, vegetables, fruits, animals, hides, wool, tallow, horns, salted and fresh meats, ores of all kinds of metals, timber, staves, wood and lumber of all kinds."

Portsmouth, Great Falls, & Conway Railroad.

We learn that the books of the company for the Portsmouth Branch will be opened on the first of next month. Some gentlemen in Boston are so confident of the speedy progress of the enterprize that they have already contracted for the rails for this branch.

Rutland and Burlington Railroad.

On the Rutland and Burlington road the work has been so far completed that the rails will be laid from Bellows Falls to Ludlow, 28 miles, early in the Spring. From Burlington to Brandon, 51 miles, it is hoped that the rails may be had early in the Spring; from Brandon to Rutland, 16 miles, it is believed, the road will be in operation by the 1st of July,—to Cuttingsville, 10 miles, in September,—and the whole line, it is expected, will be railed by the 1st November next.

Depreciation of Working Stock, or Mode of Presenting Railway Accounts.

The following remarks by the Railway Chronicle, in relation to the report of Captain Huish, on this subject, will be read with interest and profit by those who have read that report with care.

Capt. Huish has written a very interesting report on this subject, as it affects the London and North-Western railway. It is printed for the use of directors only, so that we cannot make extracts from it; but it has suggested to us the following remarks. His paper is, we should observe, a very elaborate and interesting one, and although his view of "real effective value" differs from ours, we nevertheless consider it a very valuable report.

There is one, and only one sound princi-

ple, as our intelligent readers will readily comprehend, for the maintenance of the stock of a railway (which includes the permanent way), viz., that you shall at every period that you divide profit, be able to produce (before you divide) value in stock or money for the sum at which the stock stands in the capital account. If you cannot do this, your profits have eaten up some of your capital—in other words, you have been paying dividend out of capital. This rule you will find, at every age of a railway, affords a test of whether the question of depreciation has been fairly dealth with or not. To take a case—a railway, for the first few years of its existence, in the ordinary course of things, charges every new article of stock to capital. Say it has gone on doing this for five years, and then it "takes stock"; it will find that the market value of its stock, even although it may have been kept in decent repair, will be less than its cost price has been; the reason for this being, partly in general deterioration from age, and partly from the greater cheapness with which, generally speaking, any machine can be constructed than it could be at a previous period. If this company, then has made no allowance for depreciation before declaring its dividends, it has been, to the extent of this deficiency of market value below cost price, declaring dividends out of capital.—that is, if the cost price of the stock purchased during the five years has been 100,000*l.*, and when stock is taken, this stock at its market value is only 80,000*l.*, 20,000*l.*, which ought to have been laid aside to meet this depreciation out of revenue, (that is, in accountant's language, written off against revenue to the credit of stock, so that the stock in the capital account would only have "stood at" 80,000*l.* instead of 100,000*l.*, as it does,) has been divided as profit, which ought not to have been so divided. And if this company wants to set its accounts right, it must now debit revenue with 20,000*l.* before it makes a dividend, and so reduce the stock in capital account, as that it will stand any test, and be worth at its market value, the amount at which it stands, viz., 80,000*l.*

You can easily imagine how railway companies will persuade themselves that this is not necessary, by saying that stock is better than ever it was, and so on; but unless it can stand the test, and be worth as much at its market value as it stands at in the capital account, this is a delusion. For example, suppose a railway had provided itself on opening with 100 small engines, at 1,000*l.* each, at the end of fixe yenrs, even if these engines had been liberally kept up, their market value, from the change of fashions in engines, would probably not be more than 80,000*l.* To keep up the value, then, of the stock, *revenue* should now find ten addtional new engines, costing say as much as 2,000*l.* a piece, and unless the railway paid for these entirely out of revenue, and not out of capital (as in whole or part it would be likely to do), it would be *pro tanto* eating its capital, or paying dividends out of it.

On the Bristol and Gloucester line a contractor furnished the stock, and at the end of ten years the company were bound to take that stock at its then market value; the contractor, therefore, had to chargo at such a rate for the use of this stock as would secure him from any loss at the end of ten years, in respect of the market value of his stock turning out ta be less than the cost price had been to him. Call this contractor "capital," and you have a case in point; "revenue" must pay "capital," as much as it was obliged to pay this contractor.

In regard to the London and North Western,

Its stock, excluding permanent way, has cost	£1,893,965
There has been written off, or paid for by revenue, at different times	431,072
The stock consequently stands in the capital account at	£1,462.901

Now, Capt. Huish says it is worth at present market value 1,235,640*l.* Consequently, that too much has, by this company, in its anxiety to avoid paying any portion of dividend out of capital, been written off against revenue, viz., 72,739*l.* He then argues, that if the *market* value is thus in excess, the *effective* value, or *real working* value, must be 200,000*l.* in excess; and this 200,000*l.* is available for division or transfer to a reserve fund. From this conclusion we entirely dissent, and should object to the introduction of a term which appears to us so ambiguous as "real working value"; cost price and market value we may deal with, but not this third value. To the extent, however, of the 72,739*l.*, we regard Captain Huish's argument good—assuming his estimate to be correct; but it must be observed that in 1846 the valuers made the market value of the London and North-Western stock 13,529*l. less* than the amount at which stock then stood in the capital account, whereas Captain Huish now makes the market value *more* by 72,739*l.*; thd safety of the conclusion, therefore, entirely rests upon the sufficiency of the valuation.

When you come to apply the results, you should see if you have laid aside enough to meet depreciation of rails, timber, and so on, before you talk of transferring from capital to revenue;—at least so it seems to us. On this part of the subject Capt. Huish does not enter.

Mining.

The following from the *English Mining Journal*, of January 6, may serve to relieve the anxieties of some who are fearing that the great acquisition of gold from California, will disturb the metallic currency of the world.

"The production of gold has, at all times, been a matter of great commercial moment, but at no period has the attention of the world been so generally directed to the subject as at present, in consequence of the wonderful discoveries in California. By many it is feared that the quantity already found, and said to exist, will disturb the currency, and thoroughly derange all mercantile arrangements and transactions; but, for our own part, we do not apprehend anything of the sort. It is a fallacy to do so. We believe in the reports from California, and believe, likewise, that there are great quantities of the valuable metal still to be brought to light; but, after all, gold is merely worth its value. The enormous cost of all necessaries of life and mining labour in California will not admit of the extraction of the gold at a rate to diminish its present standard, added to which an enormous population will be rapidly established in the country, which, of itself, will be sufficient to absorb the gold for the necessary requirements of trade and commerce. Although there is no doubt that vast quantities of gold have been, and continue to be, drawn, we must not suppose that the whole surface of immense tracts of territory contains the precious metal. The gold is obtained from the bottoms and sides of rivers, and the beds of ravines and brooks, which are filled up in the wet season, and which for centuries have been the repositories of the debris of gold formations washed down from the hills. It seems quite similar to the tin streams of Cornwall, where this useful metal is found in great abundance in the stratum of sand, under the bog, or turf, in the low grounds between the hills. So is it found in California and in the same strata—viz.: friable or decomposed granite.

When we read of the existence of a trench 100 ft. long, 3 ft. wide, and 2 ft. deep, yielding $17,000 of gold, we can believe the fact; but as the locality is not described, we presume that the trench was made in the winter torrent, and that the soil, a few yards from it, would not show gold. About 120 years since, certain adventurers from the province of St. Paulo, in Brazil, discovered the mines in Minas Gereas. They washed up the bottoms of brooks, until the cessation of gold in the gravel, or sand, proved the more productive gold-bearing veins, or fissures, to be near, and thus, among many others, the riches of Gongo Soco first came to light. From the vast extent of territory in California said to produce gold, it is probable that some years will elapse before the surface deposits are exhausted; but when the first fever shall have passed away, with the surface riches which caused it, attention will be drawn to the fountain of this scattered wealth. The mountains will be explored, and lodes, no doubt, will be confidently sought for, whose riches, washed away and concentrated by the elements during centuries, have been spread over the adjacent plains.

"All this, however, takes time. With it population increases, new settlements spring up in all parts of the world, trade and commerce expands, an extended currency is required; and, therefore, we again repeat our conviction that the currency will not be disturbed by the present discoveries. Besides, we feel assured that no lodes will be found, the strata is againt it. The gold is purely washings from the granite mountains, which contain gold throughout, but which will necessarily take centuries to accumulate in any quantity. After all, what is the amount of gold found, as compared with the currency of the world? It is as nothing. It is not equal to the falling off in the productions, generally, of South America. It is not equal to the existing and increasing demand for gold, for works of art and luxury. So far from being alarmed by the California riches, with respect to the standard of gold, we are inclined to consider them merely as keeping pace with the requirements of the times, and will, no doubt, lead, and justly, to the more energetic workings of existing gold companies, and probably to the formation of new undertakings for the purpose.

"As there is considerable similarity between the gold deposits in California and those which enriched the Paulistas in Brazil, an analysis of the most successful of the English mining companies established in that empire will be interesting to our readers; we allude, of course, to the St. John del Rey Mining Association. This company work three mines contiguous to each other, and drained by the same water wheel; the lode in two of the mines varies in width from 8 to 32 feet, averaging 14½ feet; and the third, the Gamba, 4 feet 7 in. The lodes dip bodily at an angle of 46 deg. at which incline the pumps are carried, and on the same plane the kibbles from the slopes under the inclined shaft, are hauled to surface. There are two water wheels for drawing stuff—one for the saw mill, and one at the reduction house for working the amalgation barrels. working 96 heads. The whole body of the deposit, between the walls, gives gold, yielding in different sections 2 to 5½ oitavas to the ton—104 oitavus being equal to 1 lb. troy. In the Gamba mine, lines of quarts, running into the country, broken for the convenience in working, give 1 to 1½ oitavas: each section in the mine is very regular in its contents. The average produce for 1847 was 4·21 oitavas per ton, which was worth in London (net) 7s. 7d. per

oitava, or £39 16 per pound troy. A cubic fathom of the deposit contains something more than 20 tons—and each fathom sunk in the three mines admits of about 9000 tons being broken, and the stopes kept in order. Westward, a continuation of the deposit near the surface has lately been ascertained, and is already opened upon, to the extent of 19 fathoms, 8 to 10 feet wide, which adds further to the resources of this magnificent mine. This new ground is close to the stamps; and there is no doubt we are assured, of its continuance westward, as there are considerable excavations of the "old" people in that direction. This mine is now giving a clear profit of above 3,000*l.* per month; and humanly speaking, a great increase is certain, as a powerful set of new stamps has just been completed. This is undoubtedly a most satisfactory state of things for the shareholders, and will enable them to receive frequent and good dividends; but what is it in comparison with the metalic circulation? And should the production continue to increase to the fullest expectation, or were there many other mines equally remunerative and yielding, we should not for a moment apprehend any alteration in the metallic currency of the world."

United States Coinage for 1848.—The President having sent into the House of Representatives the annual report of the Directors of the Mint, the following has been abridged therefrom for the Tribune:—

The deposits for coinage at the Mint and Branches during the year 1848 were as follows:

	Gold.	Silver.
At Charlotte, N. C.,	$370,799	——
At Dahlonega, Ga.,	274,473	——
At New Orleans,	183,360	2,459,774
At Philadelphia, Pa.,	2,584,460	466,732
Total	$3,413,092	$2,126,506

The coinage during the year was as follows:

	Gold.	Silver.
At Charlotte, N. C.,	$364,330 00	——
At Dahlonega, Ga.,	271,272 50	——
At New Orleans,	358,500 00	1,620,000 00
At Philadelphia,	2,780,930 00	1,620,000 00
Total,	$3,775,512 50	$2,040,000 00

The total number of *pieces* coined during the year was 12,549,790, the total value was $5,879,728 49.

The deposits of gold at the mints for coinage, which was the produce of mines in the U. S., have been as follows:

Mines.	In 1848	Total Deposits.
Of Virginia,	$57,886 since 1829	$1,008,180
Of North Carolina,	106,034 since 1824	3,995,470
Of South Carolina,	19,228 since 1828	409,094
Of Georgia,	3,370 since 1839	2,336,616
Of Tennessee,	8,497 since 1831	32,399
Of Alabama,	3,670 since 1829	49,163
Of New Mexico,	682 —— ——	682
Of California,	44,177 —— ——	44,177
Of various sources	—— —— ——	34,237
Totals,	$241,544	$7,991,685

The quantity of gold the produce of the mines of the United States coined at the branch mints has been as follows:

	In 1848.	Total since 1838.
At Charlotte, N. C.,	$370,789	$2,033,563
At Dahlonega, Ga.,	274,473	3,486,433
At New Orleans, La.,	12,589	129,376
Totals,	$657,861	$5,648,377

And the total coinage of the United States' mint, since 1793, has been

Gold.... $77,341,440 00 | Copper.... 1,209.759 20
Silver... 73,466,514 90 |
Total..... $151,017,714 10

Consisting of 343,281,750 pieces of coin.

Shipbuilding in 1846, 1847, 1848.

We have placed in comparison below, the Annual Return made to the Secretary of the Treasury of the number of vessels, and the amount of tonnage, built in each State during the financial years 1846, 1847 and 1848. A more flattering picture, showing our progress as a nation, could hardly be desired.

The following table shows the amount of tonnage and the number of vessels built in each state during the year ending June 30, 1846.

States.	Ships.	Brgs.	Schs.	Slps.	St-bts.	Total	Total Ton'ge.
Maine	47	97	140	2	3	289	49,447,60
N. H.	3	2	3			8	2,171,08
Mass.	26	26	108	4	4	160	24,321,43
R. I.	4		4	2		10	2,394,56
Conn.	1	3	26	5		35	3,712,32
N. Y.	11	8	46	170	25	260	33,253,37
N. J.	1	1	25	26	7	60	5,856,19
Penn.	2	2	15	87	55	161	15,787,59
Del.		1	12	6	3	22	2,264,13
Md.	4	18	109	3	3	137	13,817,14
Dist. of C'mba.				23		23	951,20
Virginia		2	26	6	11	45	3,465,22
N. C.			26	4	1	31	1,884,83
S. C.			4			4	342,00
Georgia				1		1	21,45
Ohio		1	13	4	34	52	9,615,50
Tenn.					4	4	574,59
Ky.					46	46	8,661,47
Mo					11	11	2,338,02
Ala.				1	3	4	557,92
La.			2	4	2	8	451,35
Mich.	3	3	14	7	8	33	5,174,01
Florida			3		5	8	840,35
Total	100	164	576	355	225	1,420	188,203,93

Number and tonnage of vessels built in the year ending June 30, 1847.

States.	Ships.	Brgs.	Schs.	Canal boats.	Steamers.	Total vessels built.	Total tonnage.
Maine	73	120	150	1	1	346	63,548,74
N. H.	7	1	2			10	5,288,48
Vt.			1	2		3	135,30
Mass.	33	13	84	5	3	138	27,769,55
R. I.	3	2	3	1	1	10	2,110,57
Conn.	3		30	8	1	42	6,027,94
N. Y.	17	5	88	138	23	371	50,994,93
N. J.			70	26	5	101	9,830,19
Penn.	8	2	31	121	66	228	24,126,37
Del.			17	6	2	25	2,279,32
Md.	5	17	108		1	131	12,691,58
Dis. of Col.		1	2	19		22	801,58
Virgina			25		2	27	1,524,92
N. C.	1		27	6		34	2,384,64
S. C.			3			3	161,72
Georgia				1		1	25,33
Ohio	1	6	29	10	37	83	18,191,53
Missouri			1	43	16	60	6,073,47
Tennessee					1	1	167,05
Kentucky			1		30	31	5,424,20
Louisiana			9	1	2	12	493,66
Florida					2	2	387,93
Michigan		1	7	4	5	17	3,293,07
Alabama	..	..	..	..	..	..	.....
Total	151	168	689	392	198	1598	243,732,67

Statement showing the number and class of vessels built in each State and Territory of the United States, in the year ending 30th June, 1848, with their tonnage:

States.	Ships.	Brigs.	Schrs.	Can'l boats.	Steamers.	Ves- built	Total tonnage.
Maine	130	118	114	3	1	366	89,974,18
N. H.	7		2			9	5,326,33
Vermont			7		2	9	1,189,18
Mass.	53	17	107	2	2	481	39,366,39
R. Island	5		4	4		13	4,058,44
Conn.	2	4	36	8	5	55	7,387,19
New Y.	27	5	100	229	21	382	68,434,88
N. Jersey			51	24	2	77	8,177,63
Penn.	7	5	26	210	48	296	29 638,12
Del.			21	9	1	31	3,205,59
Md.	15	13	117		1	146	17,480,93
Virginia	4	1	24	5		34	2,980,28
N. C.			40	3		43	2,946,85
S. C.	1	1	2			4	449,65
Georgia					1	1	212,09
Ohio	1	8	26	11	17	63	13,656,20
Missouri				18	20	38	6,256,24
Illinois							
Tennessee					1	1	54,90
Kentucky					36	39	9,274,60
Louisiana	1		11	4	2	18	1,620,39
Florida			3		1	4	317,57
Michigan	1	2	8		9	20	5,301,99
Alabam			2		2	4	265,01
Texas							
Dis. of Col.				17		17	500,46
Totals	254	174	701	547	175	1851	318,075,54

COMMERCIAL.

Welland Canal Trade,

Statement of articles of property, passed through the Welland Canal, during the season of 1848, *compared with* 1847—*showing the increase and decrease.*

The increase is indicated, in the last colum, by a †, and the decrease by a ‡.

Articles.	1848.	1847.	difference
Beef and Pork, bbls.	45491½	22543½	†22948
Flour, "	214851	329320	‡114469
Ashes, "	2631	2069	†573
Beer and cider "	89	228	‡139
Salt, "	343615	282992	†60623
Whiskey, "	5527	3030	†2497
W. lime & plas. "	11157	14040	‡2883
Fruit and Nuts, "	1820½	1613	†107½
Butter and lard, "	15542½	1393½	†14149
Seed, "	1411	1800½	‡398½
Oil and tallow, "	323	1190	‡867
Pitch and tar, "	21	100	79
Fish, "	2430½	1201½	†1229
Oatmeal, "	12	46	‡34
Liquor, "	217	114	†103
Vinegar, "	52	6	†46
Saleratus, "	5	0	†5
Beans, "	0	5	‡5.
Biscuit, "	12	0	†12
Porter, "	0	24	‡24
Peas, "	95	0	†95
Rosin, "	0	20	‡20
Cracklin, "	100	0	†100
Saw logs, No. of	3642	7594	‡3952
Empty barls. "	1426	9069	‡7643
Boards, feet,	12397916	14880823	‡2482907
Sq. limber, c. feet,	643801	1392639	‡748838
Half flatted, "	176315	30164	‡146151
Round "	43387	27533	†15954
Stave, pipe, No. of	292035	200819	†91216
Do. W. I. "	894932	490300	†404632
Do. dble flour b. "	1144819	738783	†406136
Wheat bush.	3748168	3710807	†37361
Corn, "	578864	939456	‡360592
Oats, "	0	700	‡700
Potatoes, "	834	2300	‡1466
Onions, "	50	0	†50
Butter & lard, kegs,	10839	6469	†4370
Merchandize, tons,	10020½	8999	†1021½
Fur & baggage, "	201½	242	‡40½
Iron, "	9196	7033	†2163
Coal, "	3723½	5510½	‡1786½
Castings, "	1226½	776½	†450
W. lime & plas. "	2018½	1423½	†595½
Tobacco, "	131½	169½	‡38½
Grind Stones "	485½	551½	‡66½
Hides, "	22	0	†22
Bacon & hams, "	1067½	155½	†911½
Shorts and bran, "	473	612½	‡239½
Hemp, "	294	176	†118
Rags, "	8½	3	†5½
Copper ore, "	446	0	†446
Marble, "	12½	9½	†2½
Cheese, "	½	2½	‡2
Sugar, "	738	10	†728
Lead, "	0	30	‡30
Bark, "	80	0	†80
Wool "	0	12½	‡12½
Oil cake, "	45½	120	‡74½
Leather, "	2½	16	‡13½
Tallow, "	223½	0	†223½
Bricks, "	20½	9	†11½
Stone, cords,	3532	2815½	†717½
Firewood, "	1051	1304	‡253
Stave bolts, "	32	55	‡24
Bark, "	131	44	‡87
Posts, "	168	117	†51
Shingle bolts, "	94½	0	†94½
Sand, cubic yards,	2226	1542	†684
Hops, bales,	18	0	†18
Cotton, "	20	0	†20
Wool, "	4	0	†3
Sheep skins, "	0	86	‡86
Trees, bundles	49	209	‡160
Baggage, bbl. bulk,	2075	2586	‡511
Passengers, No. of	2625½	1736	‡889½
Shingles, "	2198500	624500	†1574000
Smut machines, "	4	43	‡40
Thrashing do. "	15	100	‡85
Rails, "	7680	6400	†1180

Boat knees, "	160	525	↕365
Revolving rakes,	0	68	↕68
Hoops, racked, "	161000	99850	↑61150
Salt, bags, "	0	5909	↕5909
Bricks, "	15000	0	↑15000
Horses, "	1	0	↑1
Hogs, "	220	0	↑220
Wagons, "	48	0	48
Floats, "	100	0	100
Small Packages,"	317	0	317
Pails, doz,	240	592	352
Corn Brooms, "	0	161	↕161
Wine, hhds.	6	0	6
Schooners trips,	2024	2438	↕414
St' boats & pro. "	329	550	↕129
Scows, "	1127	1326	↕190
Rafts, "	55	77	↕22
Tonnage,	372354	453584	↕80730
Tolls,	£23076 6 2	£30135 6 2	£2059

This *does not* include the Chippawa returns.

Portland and Montreal Railway.

Since our last issue we have been favored with a copy of the Fourth Annual Report of the Directors of the St. Lawrence and Atlantic Railroad Company referred to in our last paper. In connection with the movements for the Reciprocity Bill in Congress, the doings of this railway company assume a new importance. The Direction of the St. Lawrence & Atlantic Railroad Company embraces gentlemen of the highest political and commercial position in Canada.

We give extracts from their report.

"The board reports the following as the statement of the disbursements and receipts of the company to the 30th November, the end of the fiscal year of 1848, as taken from the balances of the books of the treasurer, to which they have appended a statement of the liabilities and ways and means of the company to the 31st Dec. last:—

The St. Lawrence and Atlantic Railroad Company's Balance Sheet. 30th November, 1848.

Dr.

	£	s.	d.
To Expenses of engineer's department including instruments	10400	13	6
To land & stations, including fencing	11724	3	1
To iron, including freight, agency, insurance, &c.	44068	16	0
To grading, including bridge over the river Richelieu and wharf at Longueuil	77759	13	10
To freight, platform, and passenger cars	3063	15	11
To superstructure	12100	5	9
To machine and workshops	1280	18	6
To freight and passenger buildings	2681	10	0
To turning tables	1085	12	0
To locomotives	3281	0	7
To water station	242	2	8
To track account	3409	1	6
Total permanent disbursements for construction	171097	11	0
Preliminary expenses, including law charges, agencies, and mission to England	2948	9	0
Office expenses, and salaries, &c.	2546	7	8
Advertising and printing	500	1	4
Insurance	129	14	0
Interest paid to stockholders	1712	0	6
Interest paid exchange and discount,	1324	6	0
Amounts due by—			
City bank £311 6 5			
Bank of British North America 1440 14 11			
B. Pomeroy, collector, 888 15 1			
Due in England 2106 13 9			
Bills receivable on hand 7648 0 8			
	12395	9	10
	£192653	19	4

Cr.

By instalments on stock paid up	96909	10	10
By instalments on stock in bills receivable now current	22229	14	8
By instalments on English stock	5656	13	0
By contractors' stock	10650	0	0
	135445	18	0
By bills payable under discount at bank Br. N. America £32356 8 0			
Less—			
Stockholders' notes for collection 16195 3 11			
	16161	4	1
By amount advanced by bank of Montreal	5904	13	11
By English bankers' loan	1200	0	0
By amount due for land and stations, secured by deeds to proprietors	3363	1	8
By duty on iron	880	3	5
By amount due contractors, payable in cash	3643	15	6
By amount due contractors, payable in stock	6735	10	0
By amount due for iron and locomotives not yet matured	19419	12	3
	£192653	19	4

Thomas Steers,
Sec. & Treas.

Statement of Liabilities and Ways & Means. St Lawrence and Atlantic Railroad Company, 31st December, 1848.

Liabilities.

	£	s.	d.
To bank of British N. America— Bills under discount £28512 3 2			
Less—			
Shareholders' notes in their hands for collection 19805 2 10			
	8707	0	4
To Bank of Montreal	5236	3	11
To English bankers' loan	1200	0	0
To amounts due for lands & stations, secured by deeds to proprietors	3363	1	8
To amounts due contractors	1611	15	6
To amounts due contractors payable in stock	6735	10	0
To Amounts due for iron and locomotives, not matured	18161	12	3
Balance	92158	13	0
	£137172	16	8

Ways and Means.

By balances due by bankers, and bills receivable on hand	4997	12	11
By instalments on stock actually due in this province, and in course of collection	43155	1	11
By instalments on English stock, four-fifths of which is due	46465	12	0
By instalments on stock, payable 1st July and 1st April	35818	19	10
By stock, the capital of the company, held as security for the due performance of contracts	6735	10	0
	£137172	16	8
By balance	£92158	13	0

Thomas Steers, Sec. & Treas.

The above accounts show that the Montreal division of 30 miles has cost to the end of the last fiscal year, £171,097 11s. 0d., less the proportional expenses chargeable to other particular divisions, and such as are common to the entire road.

The board deem it necessary to state, that the road having been constructed through its principal extent within a recent period, and the banks being composed, for the most part, of clay, the road-bed will require extensive earth-filling, as well as drainage, and ballasting in the spring of the year.

The board, in reporting the purchase of a second-hand locomotive during the past season, and of an engine of first-class power from the Portland Company, at a cost of £3281 0s. 8d., have to state that they have ordered a locomotive from Messrs. Kinmonds & Co., of Dundee, to reach this country in early navigation, and with that addition to their motive power, they are still within the necessities of the road, should the traffic reach what may fairly be expected. It will also be necessary to add, at least, another second-class car to the cars already in use. They have been manufactured by Messrs. M'Lean and Wright, of this city, and have, to this period, given satisfaction.

The above recited expenditure may be fairly estimated, from calculations made with much care, at £26,902 9s. 0d., making the cost of the Montreal division, when in perfect running order, and completely furnished with motive power, allowance being made for a third first class engine, per mile, £6,600, or a total cost of £198,000.

It may not be irrevalent to remark here, that in regarding the cost of the Montreal division of the road at £198,000, it must be considered that certain items of expenditure, to wit: prolonged surveys, the cost of the lands for the terminus, and the pier with the building at Lengueuil, may, with propriety, be put down as expenditure common to, and rateable per mile on, the whole distance, say £16,000, which, at £126 per mile, for 127 miles, would reduce the cost of the first division to £185,780, or £6,192 per mile.

It must be evident to every thinking man that this enterprise has claims upon public aid which connot be advanced by any similar undertaking in the Colony. It is the link necessary to complete the continuous chain of communication by our magnificent line of public canals, and on its completion materially depends that the outlay of upwards of two millions and a half of public money be made a profitable investment to the Colony, or otherwise. A route destined to be the highway for the produce of the country drained by the great lakes, and commanding a precedence over any railway route touching the St. Lawrence, being located at a point from whence it will be the shortest route to the ocean at the cities of Portland and Boston, and being of a favorable gradient, it must consequently be the cheapest.

It may further be remarked, in connection with the canals, that, whenever its continuation through the eastern townships will permit the inexhaustible water-powers of that section of the country to come into play, and invite the capitalist to the erection of milling power, it is no visionary expectation to look forward to St. Hyacinthe, Drummondville, to Sherbrooke, and to other localities in the valley of the St. Francis, becoming places of manufacturing notoriety, and their population consummers of western produce. The line of communication which gives the superior facility for the import of raw material, will afford in an equal ratio the readiness of access necessary for the export and distribution of the manufactured article to the population

of the countries from whence that material is derived. The picture, as it is drawn, may, by the unenterprising, be looked upon as visionary, but to those whose minds are conversant with the consequences of active and well-directed exertion, it will be hailed as what may be realised. What, then, will be the state of the Colony? She will be rich in revenue, teeming with population, a source of envy to her neighbors, and a gem in the view of the statesmen of the Empire to which she is an appendage, at this moment of doubtful advantage.

From the superior facilities afforded by our Inland Navigation, and the low rate of freights from the western country, which will admit of a barrel of flour being conveyed from Cleveland to Montreal at 30 cents and from thence to Portland at 30 cents additional, making the whole cost to the seaboard 60 cents, or 3s. per barrel; this railroad, irrespective of other sources of profit, will command a trade of supply to the eastern states and the lower provinces, through the railway communication now in course of construction in Maine, towards Bangor, and elsewhere, sufficient within itself to insure a remunerative income upon the anticipated cost of construction; and who that is acquainted with the eastern townships and their resources in active operation, as well as latent, who is not satisfied, that from that source alone a large additional revenue may be expected, and an increasing one, as they are developed by the facilities of communication, which this railroad will afford.

It is impossible to consider the subject without expressing a confident expectation, that the government will give ample assistance to complete an undertaking which, if other inducements were wanting, will form 70 miles of the directest route of a railroad from Quebec through Montreal to the eastward, giving the former city from Melbourne a route to the ocean equi distant with the route from Montreal, and which will, no doubt, form a portion of the Halifax road, if it should be decided by the home government to connect it with the upper province through this city.

The board have farther to report, that a verdict was given by the high court in England in favor of the company against the account broughtby Mr. Fenn for the repaymen of the deposite on his stock subscribed in England, which was final as regarded its being the property of the company, since which they have made the balance of deposite available. They have also to state, that their last advices mention a much better feeling in England as regards the undertaking, and they desire publicly to record their high sense of the advocacy of the interests of the company, evinced in the personal exertions of Robert Gillespie, Esq., since his return from this country.

The board are informed that the Atlantic and St. Lawrence Railroad Company have 36 miles of their road in operation, and 8 additional miles graded, which are expected to be completed and in operation almost immediately. This news is cheering, as every mile made by either company lessons the entire distance, and brings the period nearer when the two companies will meet at the Boundary Line.

The Board of Directors have much pleasure in acknowledging the liberal banking facilities afforded to them towards the prosecution of their works for the past and previous year, by the bank of British North America, in this city; and they have at the same time to acknowledge pecuniary aid from the bank of Montreal for like purposes.

Before closing this report, the board desire to congratulate the company that no disturbance has disgraced the prosecution of the works, although, at one period, upwards of 1,500 men were employed, and this pleasing result they mainly attribute to the admirable regularity and system, in the management of men, used by the contractors for grading, Messrs. Black. Wood & Co. They would further bear testimony to the regularity and good management of the contractors generally.

The directors record their increased confidence in the eventual success of the undertaking, and that it will amply remunerate the stockholders as an investment.

The whole, nevertheless, humbly submitted.

A. N. MORIN, *President.*
THOMAS STEERS, *Secretary.*

EXTRACTS FROM

A LECTURE

Before the Mechanics Institute at Hamilton, C. W.

BY H. B. WILSON, ESQ., BARRISTER.

The name of Mr. Wilson is known to the public for his efforts to promote the cause of railways in Canada, especially the Great Western. A very interesting Lecture of his, delivered before the Mercantile Library Association, of Hamilton, in the winter of 1848, on the subject of Railways, was extensively published in the papers of Canada, soon after its delivery. The Lecture now before us was delivered the present winter, and at our request, Mr. Wilson has permitted us to make use of parts of it for the Journal. Our only regret is, that we cannot give it to our readers entire for want of room. Everything relating to Canada is a matter of deep interest to the people of the United States in the present position of Canadian affairs.

After speaking of the importonce of facilities of communication, and the want of them in Canada, Mr. Wilson says:

"Let us direct our attention to the consideration of the greatest of all improvements in the means of transit, that of steam power upon Railways made of iron. No invention of human genius has exercised a greater influence on the economy of human life than that of the steam engine. Certainly none has added more to our happiness and comfort.—By its magic aid not only are oceans, lakes, and rivers traversed with ease and speed, but its giant power has been made subservient to our wants in developing the hidden treasures of the earth. Most of all, however, has its effects been felt in the lightning speed with which, by its application to railways, we are enabled to traverse the surface of the earth.—In speaking of railways, therefore, I wish it always to be understood, that I speak of them in connection with that power by which their efficacy is the more fully realised. Railways were in use at many of the mines in England long before the invention of the steam engine, but the expense of their construction was so great as to destroy the reasonable hope of their general extension, unless a greater rate of speed could be obtained upon them than that of horse power. As early, therefore, as the year 1804, the attention of scientific men and capitalists was directed to the modification of the rude description of steam engine then in use to the purposes of drawing loaded wagons on rails of iron and wood. A general belief, however, prevailed that the adhesion between the wheels of the carriage and surface of the rail would not be sufficient to prevent the former from slipping, and turning round without causing the engine to advance. Many ingenious contrivances were invented to overcome this imaginary difficulty, and, strange to say, ten years elapsed, and hundreds of thousands of pounds were expended, before any body thought of trying the experiment of a smooth wheel upon a smooth level rail, when it was found to be completely successful. There is, perhaps, no example on record, which shows more conclusively the importance of *trying* the fasibility of things, before we condemn them, and establishes the old maxim that an ounce of experience is better than a pound of theory.

"Although it was ascertained so long ago as the year 1814, that steam locomotives would advance upon a smooth rail, without the aid of cogs, or teeth, yet owing to the very imperfect state in which the steam engine still continued, it remained doubtful up to the year 1829 whether it could be rendered available for the purpose of locomotion on railways. In that year the Liverpool and Manchester railway was in progress, and the directors of this great work were still uncertain whether to use the rude description of locomotive steam engine then in use, or stationary engines at various points along the line of road to draw the trains by means of ropes, or to use horse power. A premium of £500, however, was offered for the best locomotive steam engine, for which three competitors entered the lists, and the prize was awarded to one which had a speed of about 13 miles an hour. From that time to the present, continual improvements have been making in locomotive engines, until the

astonishing speed of even 100 miles an hour has been attained. It is, nevertheless, asserted by scientific men, that it is as yet only in its infancy, and that still more astonishing results may be looked for, when time and lengthened experience shall have brought the steam engine to perfection.

The result of these improvements has been already to cause the general extension of railways throughout England and the United States, as well as many other countries. Such being the case, let us examine a little more particularly into the effects which they have produced upon those countries. The cost to the consumer of almost every article of produce and manufacture is enhanced just in proportion to the expense or difficulty of getting it to the market. Every saving, therefore that can be made in the cost of transportation will benefit both the producer and consumer, by enhancing the value of the commodity to the former, and reducing it to the latter. The advantage to the agriculturalist will, if any be the greater, because the cost of transporting the raw material is always greater than that of the manufactured article. But it is unnecessary at present to discuss this point. Speed and cheapness of transport also, have the effect of bringing into cultivation soils, which otherwise would not bear the expense of working; besides, they enable the producer to grow and send to market numerous articles of a perishable nature, which would not bear the cost of lengthy water, or ordinary land, carriage —such, for instance, as many kinds of vegetables, and fresh animal food. The effect of railways in this respect is to place the most distant parts in the immediate vicinity of large towns. From the equalization of the value of the products of the soil, and of manufactures, would result a like equalization in the value of lands. The towns in their turn receive a fresh stimulus by being brought, as it were, into immediate contact with the most distant parts of the country, and their markets all abundantly supplied with better and more wholesome provisions. In transporting animal food from the producer to the consumer, alive, the distance of the market is necessarily limited by the power of the animal to travel. The quality, flavor, and wholesomeness of the meat also depend upon the distance to be travelled. But the speed and capabilities of railways for transporting large loads, affords the means of carry live stock to the market, from great distances, and without any damage to their flesh. A consideration of these facts must afford, to every unprejudiced mind, convincing proofs of the advantages of railways in equalizing the value of produce, merchandize, and lands, throughout the whole country, and in creating new and stimulating old branches of industry and enterprise. Their general extension most effectually breaks down those undue monopolies of trade, which in disatnt parts of new and poor countries are often most oppressively felt, where a wealthy capitalist, or a company, manage to reduce a whole neighborhood to a state of dependance amounting almost to a moral and physical subserviency. There is, in fact, no engine in the compass of human power capable of exerting so mighty an influence on society, and the destinies of mankind, as railways with aid of steam. It is less than twenty years since that power has been successfully applied upon them, and the locomotive engine is still said to be in its infancy; yet their effects upon those countries where their use has become extensive, have been prodigeous. 'The moral and political consequences,' says Lardner, 'of so great a change in the power of transition of persons and intelligence, from place to place, are not easily calculated. The concentration of mind and exertion, which a great metropolis always exhibits, will be extended in a considerable degree to the whole realm. The same effect will be produced as it all distances were lessened in the proportion in which the speed and cheapness of transit are increased. Towns at present removed some stages from the metropolis, will become its suburbs; others at a day's journey, will be removed to its immediate vicinity. Business will be carried on with as much ease between and the metropolis, as it is now between distant parts of the metropolis itself.' This is no exaggeration of their effects already in England; and yet England had, before the introduction of railways, more than 25,000 miles of stone and macadamized roads, besides at least 100,000 miles of common roads, and numerous canals. Stage coaches, it is true, have been driven away from the leading thorough-fares; but they have found employment on other routes, which act as feeders to to these incomparable means of transport, and their numbers have not materially decreased, if at all. In the Unfted States no less astonishing results have been achieved by the same cause. The light, knowledge, and refinement of their great cities, divested of these accompaniments of vice and immorality so common in large communities,are daily disseminated thousands of miles in the interior. Objects are accomplished now in a few years, which before required half a century to attain; and yet it is but the beginning of a great change in the social, moral, and political condition of the human race. One of the first and most striking advantares of railway transport is, the velocity with which persons and merchandize are carried from one point to another. The popular appreciation of this increase is amply illustrated by the vast increase both of travel and traffic, which the opening of a new line of railway always produce between different localities. The increase has been such, in many instances, as to baffle all calculations—generally exceeding four or five, and sometimes ten times the amount of business before existing.

"This power, as it were, to create business, must arise in part from the saving of time, and in part from the reduction on the cost of transport, and ought to be sufficient to convince every one not blinded by prejudice of the greatly superior value of this method of transit over all others, for nearly all the purposes of life. In other countries where the great number of railways has necessarily brought them into extensive competition with canals and macadamized roads, it has been found that the amount of business done upon the old routes has not been materially lessened. The inference to be drawn from this circumstance is, that many descriptions of merchandize can be carried cheaper by railway, whilst others can be carried more economically by water, or, from the shortness of the distance, by common land carriage." * * *

"Having dwelt at sufficient length upon the vast superiority of railways, as a means of internal transit over other modes of conveyance, and pointed out some of the most striking effects, which they have produced upon the condition of other countries, let us turn our attention to a short inquiry into the causes which have delayed their construction in this province. Those who have not carefully considered the subject are apt to attribute this to our poverty, or to the absence in the county of available capital, over and beyond that employed in agricultural and commercial pursuits. When we draw a comparison, however, with many of the western States, possessing much smaller resources and population, where many hundreds of miles of railway are already in successful operation, the want of capital cannot justly be assigned as the principal cause.

"In my humble opinion, the whole difficulty rests with ourselves. The necessary confidence has never been established in the country, to carry out any great undertaking requiring the concentration of capital or enterprise. The people have always been in the habit of looking to the government, or to the public funds, for means to carry out every improvement they desired. If a road

is to be opened, a bridge built, or a mud hole filled up, straightway a petition is got up to the Legislature or the District Council, and entrusted to the member representing the locality. The greater the number of such petitions with which each member is entrusted, the more important he feels himself, when he meets the Grand Council of the District or Province. When this meeting takes place, each representative has his bundle of applications for public aid, and they put their heads together, and vote away large sums of money out of the public treasury for mere local purposes. Every person familiar with the system of legislation which formerly prevailed in this Province, and which has not yet been fully corrected, must admit the truth of my statement. At the close of nearly every session of Parliament, what was termed a road bill was passed appropriating out of the public treasury a large sum of money which was always made larger the last session of each parliament, when the people's representatives were about returning to their constituents. The member or members for each constituency had the destribution of the share of the spoils appropriated for the locality they represented—and the appointment of the parties who were to expend the money. These were called commissioners, and were always composed of the friends and partizans of those by whom they were chosen. Thus the public money, which ought to have been applied for improvements of a national character, was squandered upon works of inconsiderable importance, and used for electioneering purposes. At present teh district councils exercise, in a great measure the functions formerly belonging solely to the provincial legislature—and I have reason to believe that much of the same system still prevails. The principle of levying local assessments for local improvements is as yet but imperfectly understood, and but little practised—either in our towns or the country.

"The effect of the system which causes everybody to look to the public treasury for means to make roads past each man's door, or which are mere local in their character, besides absorbing the general resources of the country, and crippling our ability to construct national works, or finish those already begun, destroys enterprise and energy in the whole community. Had our public men and legislators manifested a proper degree of public spirit at an earlier period, when railways first began to be extensively built in England and the neighboring States, there is no doubt by this time we should have had a great provincial line either finished or in a forward state of completion. We should have done as many companies in those countries did.—We should have built such portions of roads as might have yielded an immediate return to the shareholders. This would have afforded security for the raising of funds to continue them from town to town, or from one important point to another. Each portion completed would have furnished additional security and confidence both to shareholders and the public, and we might thus have raised within the country itself ample capital for the completion of the whole. Take the Great Western line as an instance. Had the company ten years ago commenced and finished the section from this to Paris, or from this to the Niagara frontier, which might have been done with the means at their disposal, there would, in my opinion, have been little difficulty in finding means to have completed the whole line. This once in successful operation, its gradual extension to Montreal would have been a matter of almost certainty within a very short period.

"Every effort hitherto made to obtain capital in other countries for building our railways, has failed; and the failure of these attempts has in all probability resulted entirely from the causes I have pointed out, viz: the want of energy, enterprise, and confidence, among ourselves. Foreign capitalists very naturally prefer investing their money where they see those who seek its investment ready and willing to jeapordise their own means, and where there is a certainty of the works undertaken being prosecuted to completion. Heretofore we offered no such guaraties.—The people of Montreal have at length taken up the subject with proper spirit. Having failed in raising capital in England, and spurred on by the energetic conduct of the people of Portland and other parts of Maine, they set earnestly to work and raised means enough among themselves to ensure the ultimate completion of the Montreal and Portland railway. A great public meeting was called in the city of Montreal, and the most powerful arguments were urged in favor of the work: committees were appointed to canvass every ward of the city, and the people on the line of the road were individually asked to subscribe for stock in the company; and almost every man did subscribe more or less according to his means. The result has been that an important section of the road has already been opened. Such efforts deserve, and I have not the slightest doubt, will meet with success. There is one very important consideration connected with the building of railways, but little understood in Canada—and that is, that the very expenditure of the money in making a railway, furnishes the means to the stockholders, living on or near the line of road, to pay up their calls on the stock, as the money necessarily, through the various channels of business, finds its way back to their pockets or tills. In this way the city of Hamilton might contribute a million of dollars in the course of three or four years without drawing anything of consequence, except temporarily, out of the business capital of the place." * * *

"It is only by a united effort of the whole country that we can expect to create confidence, and obtain the means to carry into effect so great an undertaking as a national or provincial line of railway.

"Fortunately for us, the peculiar geographical position of Canada leaves no difficulty in making choice of the proper route. The settled portion of the province is comprized within a comparatively narrow belt or strip of land, extending along the St. Lawrence and Lakes Ontario and Erie. By commencing at Windsor, opposite Detroit, and following the most direct route to the head of Lake Ontario, at Hamilton, you pass through the very heart of the finest and most populous part of the whole province. You connect all the villages and towns of importance, for they all lie immediately on the line, or within a very short distance from it. At Detroit you connect with the Michigan Central Railway, and others extending into the heart of that rapidly growing State, and which will shortly penetrate the immense fertile regions of the Valley of the Mississippi. You also command the outlets of Lakes Honore, Michigan, and Superior, about the shores of which exists such inexhaustible stores of mineral wealth, already in the course of rapid development—lakes which must, in a few years, possess a trade greater than the whole of British America at present. At Hamilton the traveller and the merchant has offered to him, during the season of navigation, the choice between steamboat and railway. By the latter you may proceed to the Niagara Frontier, at all seasons, where you meet the railways of the State of New York extending to the great maratime cities of the Union. The Maine branch, however, will follow the course so clearly pointed out for its extension, along the North shore of Lake Ontario to Montreal, and from thence to Quebec; thus connecting those ancient cities of Canada, by an uninterrupted line of railway, with the great valley of the Mississippi, and with all the intermediate towns and cities, and all these with each other. At Kingston and Prescott you connect with American roads in the course of being built, and at Montreal with the St. Lawrence and Atlantic Railway,

before referred to." * * *

"As compared with the rapid progress in wealth, population, and resources, with some of the adjoining States, we absolutely appear to be standing still. The superior inducements offered for the investment of capital, and the exercise of labor, talent and skill, by our neighbors, are every year causing tens of thousands of Englishmen, composed of all classes, to forego their allegiance to their Queen and government, and to lay aside their predelictions in favor of British laws and institutions, in order to participate in the advantages of Yankee enterprize, and to secure to themselves and their children the means of a comfortable subsistence. You may concoct schemes of emigration till dooms-day, and you will not draw to this province an emigration such as that which is annually attracted to United States, by the reasons I have assigned. Great indeed must be national resources of a country, in the present day, which does not acturally retrograde if it possess no railways; and I shall not be surprised to see a large emigration from this country to United States in a few years, unless our government take up the subject in a manner becoming its importance, and remove the reproach under which we labor, of being wanting in enterprise." * * *

AMERICAN RAILROAD JOURNAL.

Saturday, February 10, 1849.

Railroads in Cuba.

The rapidly increasing commerce of Cuba, its growing trade with this country, together with the large share of public attention which it has engaged in consequence of the agitation of the question of its purchase by our government, has induced us to make some inquiry into the condition of railroad enterprise there. In the prosecution of our researches we were struck with the almost entire absence of books and documents on the subject, and the general want of information, available to the community, relative to this beautiful island. We must confess we were not prepared to find that an island, 700 miles long, with millions of acres of fertile lands teeming with all the wealth of the tropics, bearing a population of *a million and a quarter of people*, exporting products of its own soil to the astonishing amount of nearly thirty millions of dollars annually, possessing numerous harbors, unequalled in magnitude and safety, and not more than three days' sail from our own shores, should only be known, comparatively speaking, to the few merchants and traders in immediate commerce with it. We trust the time is not far remote when the public shall be possessed of more accurate information, and our libraries enriched with some good work upon its present condition and future prospects.—But we are wandering from our purpose, which is to make a few remarks upon its system of railroads. There is, perhaps, no country in the world more adapted to this class of road, than the island of Cuba. Mountainous in its general aspect, but abounding in rich valleys without navigable streams, great difficulty was experienced in opening roads by which to convey the products of its soil to market. The deep alluvial lands of the plains made the cost of common roads very expensive, and these when built were incapable of resisting the torrents that fall within the tropics during the rainy season. The rail was found to be the most economical road that could be constructed, and the fact that short routes from the different bays into the interior could be made immediately productive, and at the same time bring new and hitherto unapproachable lands into the market, stimulated the government to take the initiative, and afterwards to favor every private enterprise of the kind. Rails, locomotives, cars, and every article for the construction and equipment of railroads are admitted free of duty. The result has been that more than 250 miles of road has been completed and are now in successful operation, and about 200 miles more are either in progress of construction or projected. The advances already made in the laying of road have been of very great advantage to the island, as where these have been constructed the expense of bringing the products of the different estates to a shipping point has been diminished fully 75 per cent. That all the roads of Cuba will ultimately be connected with each other, seems now very probable, and this will certainly redound much to the benefit of the general interests of the country, whatever effect it may have upon particular roads.

Under the administration of the celebrated Tacon, the first step was taken, and the road to Guines planned and commenced by the government. It was completed in 1838? Length 45 miles. This line now forms the main trunk of an extended system. In 1843 it was transferred by the government to a corporate company of private individuals, who proceeded to construct a branch towards the west. This branch is completed to San Antonio, about 19 miles from the point where it leaves the main road, and is being continued to Guanajay, 15 miles further, to which terminus it will be opened during the coming summer. The road with this branch forms an arc, and at Guanajay it approaches within six miles of Mariel, a large bay about 30 miles west of Havana. They have since run another branch about 7 miles long, from the main trunk to Batabano. This completes the communication between the north and south sides of the island, and steamers are now running from Batabano to St. Jago, touching at Cienfuegos, Trinidad, Santa Cruz, and Manzanillo, and also to Coloma and Pinar del Rio. From Guines the main road has been continued to Reyes, about 37 miles, where it connects with the Matanzas and Sabanilla road, forming thus a complete line from Havana to Matanzas. The company have 108 miles of road in running order, and 15 more in construction. From Matanzas two roads have been constructed. The Sabanilla, road opened in 1847, takes, very nearly, a south direction to Reyes, where it connects with the Havana road. From Reyes it diverges eastwardly to Bolondran, and will no doubt soon be completed to a connection with the Cardenas road. About 28 miles are now open. The Coliseo road, opened in 1848, has an east course thro' the plains between Matanzas and Cardenas near the North Coast. It is in operation about 20 miles, and will also, no doubt, be continued to a junction with the Cardenas road.

The Cardenas road, having its terminus on the bay of Cardenas, was opened in 1846. It has, very nearly a South course, and is completed to Montalvo, about 25 miles, and is one of the most profitable roads in Cuba.

The Jucaro road, running from a point on the bay of Cardenas, opposite to the town, is in operation to Pijuan, 21¼ miles, with two branches—one of 4¼ miles, to Sabanilla de la Palma, and the other to Banaguises, 9 miles in length. The general direction of the road is S. E. It will, no doubt, be continued to Cienfuegos, and eventually be brought into the town of Cardenas, when it will be one of the most important roads in Cuba.

At San Juan de los Remedios a road is being constructed to its port, Caibarien, distant about 5 miles. In a few years it will no doubt be continued into the interior, and add much to the wealth of the town.

Puerto Principe has not allowed herself to be outstripped in the march of improvement. A fine road has been laid out to Nuevitas, a port on the North coast, distant about 31 miles. About one-half of this road remains to be completed; but as it is in active construction, we hope it will be finished before the expiration of another year.

The country around St. Jago is not favorable to this class of enterprise, as the mountains at that part of the Island approach very closely to the sea. A small road to Cobre has been constructed for the purpose of bringing to the port the copper ore so extensively mined there—length, about 7 miles. Trinidad also lies disadvantageously for the construction of railroads, being entirely surrounded by mountains. Rails have been laid to Casilda, its port distant about 6 miles, on which horse power is used.

Cienfuegos possesses, as yet, no road; a project is on foot to construct one to Villa Clara, about 50 miles distant, which we hope will be accomplished. There has been some talk also of one from Sagua to Villa Clara.

With the exception of a short piece of road laid from Havana to Guanabacoa, about 2 miles, now almost useless, and the projected road from Havana to Matanzas, along the North shore of the Island, which will probably never be built, we believe we have mentioned all the roads constructed or projected, thus far, in Cuba. We trust, however, the day is not far distant when it will be found desirable and feasible to open other lines, bringing new lands into cultivation, and pouring yet greater wealth into the lap of commerce. Much of the foregoing has been compiled from memory, and perhaps incorrect data, and we may have committed some errors. Will some of those gentlemen, Messrs. Wright, Dod, Clark, Don Jose Manuel Carrera, and others, so long and intimately connected with railroads in Cuba, favor us with copies of reports, documents, and statistics attainable by them?

Railway Progress.

The year 1848 has witnessed greater progress in the extension of railways than any previous one, notwithstanding the continued stringency in money matters during its whole period. Both in the United Kingdom and the United States the number of miles put in operation has been very nearly twice as great as in any previous year. At the commencement of a new year, which, from present indications, seems likely to surpass any previous one in the accomplishment of works of a similar character, we have attempted, as preliminary to a careful examination of the railways of the country, to give in a condensed form a view of the several roads in each State of the Union.

This is a work not so easily accomplished as desired; to prove which, we need only refer to a matter within the knowledge of every one in New York, who is at all conversant with railway operations.—In The Merchants Magazine, of December last,

a tabular statement was published, purporting to give, among other items, the number of railroad companies, and the number of miles of railway in actual operation in each State of the Union, compiled from DOGGETT'S RAILWAY GUIDE. In this table, the number of companies and the miles of road in operation were given as follows:

	Companies.	*Miles in operation.*
Maine	3	226½
New Hampshire	2	99
Vermont	1	33
Massachusetts	36	1929
Rhode Island	2	91
Connecticut	4	253
New York	20	798
New Jersey	4	155
Pennsylvania	9	355
Maryland	9	661
Virginia	6	264
North Carolina	2	248
South Carolina	2	204
Georgia	5	602
Kentucky	1	28
Mississippi	2	70
Alabama	1	67
Ohio	4	307
Indiana	1	86
Michigan	2	241
	117	6720

Any one acquainted with railways in New England, would, as a matter of course, perceive that the number of miles in operation was largely overstated.

The high authority of the Merchants' Magazine on all questions of statistics, and kindred subjects, has caused an extensive circulation of the table before referred to, giving us credit for more miles of railway than we at present enjoy.

We presume the errors occurred by counting portions of trunk lines more than once, as in Doggett's valuable Guide the distances, fare and running time of the trunk lines are repeated in giving a view of the various branches. For example the Boston and Maine railroad is given as a trunk line to Portland, though it connects with the Portland, Saco and Portsmouth railroad, 38 miles from Portland. It has a branch to Great Falls of 2½ miles only, but in giving a statement of the running of the Great Falls trains, the whole distance from Boston is put down including 69 miles on the Boston and Maine road.

In this way, Massachusetts has credit for the whole distance, and counted more than once beside. Instead of 1929 miles of railway in Massachusetts, as stated in the table before referred to, the actual number of miles January 1, 1848, was 701¼, and including new openings during 1848, amounts to 872¼ only. This is an extraordinary number for a State of no greater extent of territory than Massachusetts, and we intend to speak of this more fully hereafter. We allude to this matter to show that under the peculiar organization of our government, having no central power to control the movements of railways or the different systems of legislation of the several States, no one can readily acquire full and accurate information of our extended railway lines.

Without asserting that we have reached perfect accuracy in our statements, we have great confidence that our tables below will be found more nearly correct than anything before published on the subject. We have spoken of this matter in the hope that parties interested in the different lines in the country, will give us at an early day more full accounts in relation to their several roads. We are preparing a full Share List of all the railways in this country, in Canada and Cuba, so that our friends across the water may take more accurate note of American Railways, and our own projects be better understood at home. In the United Kingdom, as well as in other countries of Europe, the whole railway system of each county is under one general law. Not so in the United States. The legislation of each State is independent of ever other, and the law governing railways is far from being harmonious in the several States. Take for instance the Boston and Maine railway. It was originally a corporation of Massachusetts only. It is now created a corporation in New Hampshire and Maine also. It is managed by one Board of Directors, and has a common stock, though subject to the legislation of three States.

So with the Portland and Montreal Railroad. It has an original charter from Maine, and the same company is constituted a corporation in New Hampshire and Vermont. The New York and Erie, and many other roads, have been compelled to resort to different jurisdictions to secure the most desirable lines.

In some of the States provision is made, by law, for full returns from the different railway companies, showing the cost, character, and working power of each road, while in others, nothing of this kind is required.

In showing the progress of railways, we propose to give, in the first place, a list of those in operation January 1, 1848, in each State; then, the opening of new roads during the year, bringing the account down to Jan. 1, 1849, naming also those in progress.

MAINE.

Roads in Operation Jan. 1, 1848.

Calais and Baring	3 miles.
Machiasport	8
Bangor and Piscataquish, (to Olltown	11½
Portland, Portsmouth and Saco	51
Boston and Maine	3
	76½ miles.

Opened during 1848.

Atlantic & St. Lawrence (now opened 36 miles)	28
Androscoggin and Kennebec	6½
	34½
Total	111½ miles

Roads in Progress.

Atlantic and St. Lawrence.
Androscoggin and Kennebec.
Kennebec and Portland.
Bath Branch.
York and Cumberland.
Buckfield Branch.

NEW HAMPSHIRE.

In Operation Jan. 1, 1848.

Eastern	16 miles.
Nashua and Lowell (9½ in Mass.)	5½
Concord	34
Boston and Maine	35½
Great Falls Branch	2½
Northern	65
Cheshire (54 in all)	9½
	167½ miles

Opened during 1848,

Northern	4
Boston, Concord, and Montreal	36
Bristol	12
Nashua and Worcester	7
Cheshire	34½
	96½ miles
Total	260½ miles

Roads in Progress.

Sullivan (since opened 28 miles.)
Boston, Concord and Montreal.
Concord and Claremont.
N. H. Central.
Portsmouth and Concord.

VERMONT.

Roads in Operation Jan. 1, 1848.

None.

Opened during 1848.

Vermont Central (since opened 69)	52 miles.
Connecticut and Passumpsic	39½
	91½ miles

Roads in Progress.

Central.
Burlington and Rutland.
Connecticut River.

MASSACHUSETTS.

Roads in Operation Jan. 1, 1848.

Berkshire	21 miles.
Boston and Lowell	25
Woburn Branch	5
Boston and Maine	36½
Boston and Providence (43 in all)	40
Stoughton Branch	4
Dedham Branch	2
Boston and Worcester	44
Milburry Branch	3
Saxonville Branch	4
Milford Branch	8
Cheshire	11
Connecticut River	36
Chicopee Branch	2½
Dorchester and Milton Branch	3
Eastern	38
Marblehead Branch	3
Gloucester "	13
Salisbury "	3
Essex	1½
Fall River	42
Fitchburg	50
Hartford and New Haven	6
Lexington and West Cambridge	6
Nashua and Lowell	9½
New Bedford and Taunton	20
Norwich and Worcester (66 in all)	17
Old Colony	37
Pittsfield and North Adams	18½
Providence and Worcester	27
Taunton	11
Vermont & Massachusetts (69 in all)	14
Western	117
West Stockbridge	23
	701½ miles

Opened during 1848.

Cape Cod Branch	28
Peterboro and Shirley	12
Essex	18
Stony Brook	13
Vermont and Massachusetts	35
South Shore	11½
Nashua and Worcester	37
Lowell and Andover	12
Milford Branch	4
	170½
Total	872½ miles

In Progress.

Norfolk County.
Fitchburg and Worcester.

Connecticut River.
Grand Junction.
Vermont and Massachusetts.

RHODE ISLAND.

In Operation January 1, 1848.

Providence and Stonington, (50 miles)	45 miles.
Providence and Worcester	16¼
Boston and Providence	3
	64¼
Opened during 1848	none.

Roads in Progress.

Providence and Hartford.

CONNECTICUT.

In Operation January 1, 1848.

Norwich and Worcester, (66 miles)	49 miles.
Providence and Stonington	5
Hartford and New Haven (62 in all)	56
Housatonic	74
	194

Opened during 1848.

New York and New Haven (76 in all)	48¼
New Haven canal	28
	76¼
Total	275 miles.

In Progress.

New Haven Canal.
Naugatuck.
Hariford and Willimantic.

NEW YORK.

In operation January 1, 1848.

Albany and Schenectady	17 miles.
Utica and Schenectady	77¼
Utica and Syracuse	53
Long Island	95
New York and Erie	62
New York and Harlem	53
Hudson and Berkshire	30
Troy and Greenbush	6
Rensselaer and Saratoga	31¼
Saratoga and Schenectady	22
Troy and Schenectady	20¼
Auburn and Syracuse	26
Auburn and Rochester	77
Tonawanda (Rochester to Attica)	44
Attica and Buffalo	31¼
Buffalo and Niagara	22
Lockport and Niagara	24
Lewiston	9
Cayuga and Susquehannah	28¼
Corning and Blossburg	40
	770

Opened during 1848.

New York and New Haven	14
New York and Erie	138
New York, Harlem and Albany	30
Washington and Saratoga	40
Oswego and Syracuse	41
Northern (Ogdensburg)	12
	275 miles.
Total	1045 miles.

Roads in Progress.

New York and Erie.
Hudson River.
New York, Harlem and Albany.
Northern (Ogdensburg.)

Concluded in next No.

RAILROAD IRON AND LOCOMOTIVE Tyres imported to order and constantly on hand by A. & G. RALSTON
Mar. 20tf 4 South Front St., Philadelphia.

DIRECT ACTION ENGINES
FOR STEAMBOATS.
THE PATENT DOUBLE CYLINDERS,
AND ALSO
THE ANNULAR RING PISTON ENGINES,
of Messrs. Mauldslay, Sons & Field, of London. may be built in the United States, under license, which can be obtained of their agent,
THOMAS PROSSER, C. E.,
28 Platt street, New York.
May 6, 1848.

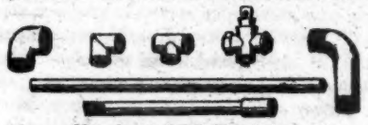
PATENT HAMMERED RAILROAD, SHIP and Boat Spikes. The Albany Iron and Nail Works have always on hand, of their own manufacture, a large assortment of Railroad, Ship and Boat Spikes, from 2 to 12 inches in length, and of any form of head. From the excellence of the material always used in their manufacture, and their very general use for railroads and other purposes in this country, the manufacturers have no hesitation in warranting them fully equal to the best spikes in market, both as to quality and appearance. All orders addressed to the subscriber at the works, will be promptly executed. JOHN F. WINSLOW, *Agent.*
Albany Iron and Nail Works, Troy, N. Y.
The above spikes may be had at factory prices, of Erastus Corning & Co., Albany; Hart & Merritt, New York; J. H. Whitney, do.; E. J. Etting, Philadelphia; Wm. E. Coffin & Co., Boston. ja45

TO RAILROAD COMPANIES AND BUILDERS OF MARINE AND LOCOMOTIVE ENGINES AND BOILERS.

PASCAL IRON WORKS.

WELDED WROUGHT IRON TUBES

From 4 inches to ¼ in calibre and 2 to 12 feet long, capable of sustaining pressure from 400 to 2500 lbs. per square inch, with Stop Cocks, T's, L's, and other fixtures to suit, fitting together, with screw joints, suitable for STEAM, WATER, GAS, and for LOCOMOTIVE and other STEAM BOILER FLUES.



Manufactured and for sale by
MORRIS, TASKER & MORRIS.
Warehouse S. E. Corner of Third & Walnut Streets,
PHILADELPHIA.

FAIRBANKS' RAILROAD SCALES.

THE Subscribers are prepared to construct at short notice, *Railroad* and *Depot Scales*, of any desired length and capacity. Their long experience as manufacturers—their improvements in the construction of the various modifications, having reference to strength, durability, retention of adjustment, accuracy of weight and despatch in weighing—and the long and severe tests to which their scales have been subjected—combine to ensure for these scales the universal confidence of the public.
No other scales are so extensively used upon Railroads, either in the United States or Great Britain; and the manufacturers refer with confidence to the following in the United States.

Eastern Railroad,	Boston and Maine R. R.,
Providence Railroad,	Providence & Wor. R.R.,
Western Railroad,	Concord R. R.,
Old Colony Railroad,	Fitchburg R. R.,
Schenectady Railroad,	Syracuse and Utica R. R.,
Baltimore & Ohio Road,	Baltimore & Susq. R. R.,
Phila. & Reading Road.	Schuylkill Valley R. R.,
Central (Ga.) Railroad.	Macon and Western R.R.,

New York and Erie Railroad;
and other principal Railroads in the Western, Middle and Southern States.
E. & F. FAIRBANKS & CO.
St. Johnsbury, Vt.
Agents { FAIRBANKS & Co., 81 Water st. N. York. A. B. NORRIS, 196 Market st., Philad.
April 22, 1848. 1y*17

RAILROAD IRON—2500 TONS HEAVY H Rail, now landing, and expected shortly to arrive, for sale on most favorable terms by
DAVIS BROOKS & CO.
July 19th, tf 68 Broad street, New York.

NEW PATENT CAR WHEELS.

THE SUBSCRIBERS ARE NOW MANUfacturing Metallic Plate Wheels of their invention, which are pronounced by those that have used them, a superior article, and the demand for them has met the most sanguine expectations of the inventors. Being made of a superior quality of Charcoal Iron, they are warranted equal to any manufacture.
We would refer Railroad Companies and others to the following roads that have them in use. Hartford and New Haven, Connecticut River Railroad, Housatonic, Harlem, Farmington, and Stonington.
SIZER & CO.
January 29, 1848. tf Springfield, Mass.

WILLIAM JESSOP & SONS,
CELEBRATED CAST-STEEL.
The subscribers have on hand, and are constantly receiving, from their manufactory,
PARK WORKS, SHEFFIELD,
Double Refined Cast Steel—Square, flat & octagon.
Best warranted Cast Steel—Square, flat & octagon.
Best Double and Single Shear Steel—Warranted.
Machinery Steel—Round.
Best and 2d gy. Sheet Steel—for Saws and other purposes.
German Steel—flat and sqr., "W. I. & S." "Eagle" and "Goat" Stamps.
Genuine "Sykes," L Blister Steel.
Best English Blister Steel, etc., etc., etc.
All of which are offered for sale on the most favorable terms, by WM. JESSOP & SONS,
91 John Street, New York.
Also by their Agents—
Curtus & Hand, 47 Commerce St., Philadelphia.
Alex'r Fullerton, & Co., 119 Milk St., Boston.
Stickney & Beatty, South Charles St., Baltimore.
May 6, 1848.

SPRING STEEL FOR LOCOMOTIVES, Tenders and Cars. The Subscriber is engaged in manufacturing Spring Steel from 1¼ to 6 inches in width, and of any thickness required: large quantities are yearly furnished for railroad purposes, and wherever used, its quality has been approved of. The establishment being large, can execute orders with great promptitude, at reasonable prices, and the quality warranted. Address
JOAN F. WINSLOW, *Agent,*
1y Albany Iron and Nail Works,

RAILROAD IRON.

THE Undersigned are prepared to Contract for the delivery of ENGLISH RAILROAD IRON, of favorite brands, during the Spring. They also receive orders for the importation of Pig, Bar, Sheet, etc., Iron.
THOMAS B. SANDS & Co.
22 South William-Street.
Feb. 3tf. New York.

RAILROAD IRON.

1000 tons T Rails, weighing about 60lbs. to the yard, of the latest and most approved pattern, for sale by BOORMAN, JOHNSTON, & CO.,
119 Greenwich st., New York.
Jan. 20, 1849. 6w

DEAN, PACKARD & MILLS,
MANUFACTURERS OF ALL KINDS OF
RAILROAD CARS,
SUCH AS
PASSENGER, FREIGHT AND CRANK CARS,
— ALSO —
SNOW PLOUGHS AND ENGINE TENDERS
OF VARIOUS KINDS.
CAR WHEELS and AXLES fitted and furnished at short notice; also, STEEL SPRINGS of various kinds; and
SHAFTING FOR FACTORIES.
☞ *The above may be had at order at our Car Factory,*
REUEL DEAN, ELIJAH PACKARD, ISAAC MILLS, } SPRINGFIELD, MASS.
1y48

JAMES LAURIE, *Civil Engineer.*
No. 23 Railroad Exchange, Boston, Mass.

Railroad Routes Explored and Surveyed. Estimates, Plans and Specifications furnished for Dams, Bridges, Wharves, and all Engineering Structures
October 14, 1848. 6m

MASONS AND STONECUTTERS WANTED—AT THE U. S. NAVY YARD, NEAR PENSACOLA.—Twenty good Stonecutters can find immediate employment at dressing granite by the superficial foot. The *beds* and *builds* of the stone will alone be dressed—the face being left rough. For this work the high price of 25 cents per superficial foot will be allowed on the stone now in the yard, and the tools sharpened.

Those who are Masons as well as Stonecutters, will be preferred: and, more especially, those who are disposed to work, when necessary, in Diving Bells. The works in progress are very extensive, and will, probably, afford constant employment for some years.

To good workmen, of the above description, when employed by the day, the wages will be $2.50, on the ten hour system; to which, an addition at the rate of one dollar per day will be made for such time as they may be employed in the Diving Bells. Or at the rate of $3.50 per day.

The Diving Bells, and Machinery, are constructed on the most approved plans, and will be abundantly supplied with air and light, and the water kept low in the Bells, so that no inconvenience will be felt by the workmen, the depth being only from 25 to 30 feet.

Two good Machinists can also find employment in the Navy Yard. Apply in person, to
JAMES HERRON,
Civil Engineer, Navy Yard.
Jan. 1. 10t

RAILROAD IRON.

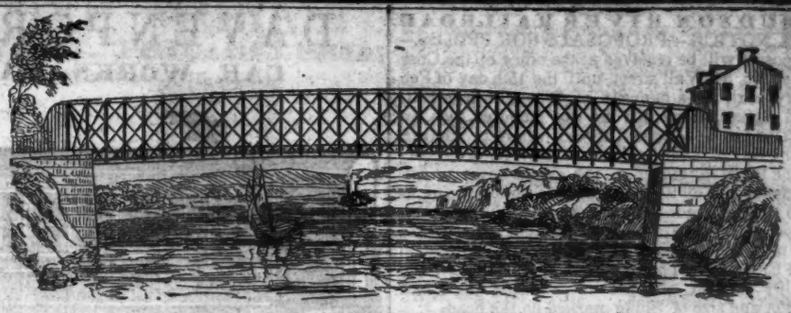
THE TRENTON IRON COMPANY ARE now turning out one thousand tons of rails per month, at their works at Trenton, N. J. They are prepared to enter into contract to furnish rails of any pattern, and of the very best quality, made exclusively from the famous Andover iron. The position of the works, on the Delaware river, the Delaware and Raritan canal, and the Camden and Amboy railroad, enables them to ship rails at all seasons of the year. Apply to
COOPER & HEWITT, Agents,
17 Burling Slip, New York.
October 30th, 1848.

MANUFACTURE OF PATENT WIRE Rope and Cables for Inclined Planes, Standing Ship Rigging, Mines, Cranes, Tillers etc., by
JOHN A. ROEBLING, *Civil Engineer,*
Pittsburgh, Pa.

These Ropes are in successful operation on the planes of the Portage Railroad in Pennsylvania, on the Public Slips, on Ferries and in Mines. The first rope put upon Plane No. 3, Portage Railrord, has now run 4 seasons, and is still in good condition. 92v1 1y

NORWICH CAR FACTORY,
NORWICH, CONNECTICUT.

AT the head of navigation on the River *Thames.* and on the line of the *Norwich and Worcester Railroad,* established for the manufactory of
RAILROAD CARS,
OF EVERY DESCRIPTION, VIZ:
PASSENGER, FREIGHT AND HAND CARS,
ALSO, VARIOUS KINDS OF
ENGINE TENDERS AND SNOW PLOUGHS.
TRUCKS, WHEELS & AXLES
Furnished and fitted at short notice.
Orders executed with promptness and despatch.
☞ Any communication addressed to
JAMES D. MOWRY,
General Agent,
Norwich, Conn.,
Will meet with immediate attention. 1y8



RIDER'S PATENT IRON BRIDGE.

The Rider Iron Bridge having now been fully tested on the Harlem Railroad, by constant use for about eighteen months, and found to answer the full expectations of its most sanguine friends, is now offered to the public with the utmost confidence as to its great utility over any other Bridge now known.

The plan of this Bridge is to use the iron so as to obtain its greatest longitudinal strength, and at the same time is so arranged as to secure the combined principles of the *Arch, Suspension* and *Triangle,* all under such controlling power as causes each to act in the most perfect and secure manner, and at the same time impart its greatest strength to the whole work.

The Rider Iron Bridge Company are prepared to furnish large quantities of Iron Bridging for Rail Road or other purposes, made under the above Patent, at short notice, and at prices far *more economical* than the best wood structure, and on *certain conditions,* the first cost may be made the same as wood.

Models, and pamphlets giving full descriptions of the Rider Bridge, with certificates based on actual trial from undoubted sources, will be found at the office of the Company, 74 BROADWAY, *up stairs,* or of W. Rider & Brothers, 58 *Liberty Street,* where terms of contract will be made known, and where orders are solicited.
M. M. WHITE,
November 25, 1848. Agent for the Company.

LAP—WELDED
WROUGHT IRON TUBES
FOR
TUBULAR BOILERS,
FROM 1 1-2 TO 8 INCHES DIAMETER.

These Tubes are of the same quality and manufacture as those so extensively used in England, Scotland, France and Germany, for Locomotive, Marine and other Steam Engine Boilers.
THOMAS PROSSER,
Patentee.
28 Platt street, New York.

ENGINEERS' AND SURVEYERS'
INSTRUMENTS MADE BY
EDMUND DRAPER,
Surviving partner of
STANCLIFFE & DRAPER.

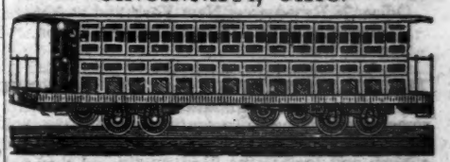
No 23 Pear street, below Walnut,
ly10 near Third, Philadelphia.

RAILROAD SCALES.—THE ATTENtion of Railroad Companies is particularly requested to Ellicotts' Scales, made for weighing loaded cars in trains, or singly, they have been the inventors, and the first to make platform scales in the United States; supposing that an experience of 20 years has given a knowledge and superior advantage in the business.

The levers of our scales are made of wrought iron, all the bearers and fulcrums are made of the best cast steel, laid on blocks of granite, extending across the pit, the upper part of the scale only being made of wood. E. Ellicott has made the largest Railroad Scale in the world, its extreme length was one hundred and twenty feet, capable of weighing ten loaded cars at a single draft. It was put on the Mine Hill and Schuylkill Haven Railroad.

We are prepared to make scales of any size to weigh from five pounds to two hundred tons.
ELLICOTT & ABBOTT.
Factory, 9th street, near Coates, cor. Melon st.
Office, No. 3 North 5th street,
ly25 Philadelphia, Pa.

CAR MANUFACTORY,
CINCINNATI, OHIO.



KECK & DAVENPORT WOULD RESpectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to different points speedy and economical. They are prepared to execute to order, on short notice, Eight-Wheeled Passenger Cars of the most superior description, Open and Covered Freight Cars, Four or Eight-Wheel Crank and Lever Hand Cars, Trucks, Wheels and Axles, and Railroad Work generally.
Cincinnati, Ohio, October 2, 1848. 41tf

RAILROAD IRON.

THE MOUNT SAVAGE IRON WORKS, Allegheny County, Maryland, having recently passed into the hands of new proprietors, are now prepared, with increased facilities, to execute orders for any of the various patterns of Railroad Iron.—Communications addressed to either of the subscribers will have prompt attention.
J. F. WINSLOW, President
Mount Savage Iron Co., Troy, N. Y.
ERASTUS CORNING, Albany.
WARREN DELANO, Jr., N. Y.
JOHN M. FORBES, Boston.
ENOCH PRATT, Baltimore, Md.
November 6, 1848.

THE NEWCASTLE MANUFACTURING Company continue to furnish at the Works, situated in the town of Newcastle, Del., Locomotive and other steam engines, Jack screws, Wrought iron work and Brass and Iron castings, of all kinds connected with Steamboats, Railroads, etc.; Mill Gearing of every description; Cast wheels (chilled) of any pattern and size, with Axles fitted, also with wrought tires, Springs, Boxes and bolts for Cars; Driving and other wheels for Locomotives.

The works being on an extensive scale, all orders will be executed with promptness and despatch. Communications addressed to Mr. William H. Dobbs, Superintendent, will meet with immediate attention. ANDREW C. GRAY,
a45 President of the Newcastle Manuf. Co.

HUDSON RIVER RAILROAD NOTICE.—PROPOSALS FOR SPIKES.—Proposals will be received at the office of the Company, No. 54 Wall street, until the 15th day of February next, for a quantity of Wrought Iron Railroad Spikes, from fifty to two hundred tons, (of 2000 lbs.) to be delivered at such wharf or wharves on the line of said Railroad as may be designated by the Chief Engineer in the employment of said Company. The Spikes to be nine-sixteenths of an inch square, headed and sharpened, suitable for the purpose, and to be of such lengths, not less than six nor more than seven inches, as may be required by said Engineer. The Spikes to be made of the best quality of iron, and put into suitable kegs, with weight and size of Spike marked on the head.

The Directors reserve to themselves the right to accept or reject proposals that may be offered, as they may consider the interest of the Company to require.

JOHN B. JERVIS, Chief Engineer.

Office Hudson River Railroad Co.,
New York, 10th Jan., 1849. 3t2

FULLER'S PATENT INDIA RUBBER SPRINGS.—The Commissioner of Patents has dissolved the interference which had been declared against this Patent. The Patentee is ready to supply the springs upon the shortest notice, in any quantity, and at a moderate cost. They have now been in use for nearly 4 years, with complete success. They are made of the best materials, are economical, both as to cost and wear; are light and very easy in their motion.

The patent was granted to W. C. Fuller, in October 1845. G. M. KNEVITT, *Agent.*

Office, 78 Broad street New York, and at Messrs. James Lee & Co., 18 India Wharf, Boston.

Jan. 13, 1849.

NICOLL'S PATENT SAFETY SWITCH for Railroad Turnouts. This invention, for some time in successful operation on one of the principal railroads in the country, effectually prevents engines and their trains from running off the track at a switch, left wrong by accident or design.

It acts independently of the main track rails, being laid down, or removed, without cutting or displacing them.

It is never touched by passing trains, except when in use, preventing their running off the track. It is simple in its construction and operation, requiring only two Castings and two Rails; the latter, even if much worn or used, not objectionable.

Working Models of the Safety Switch may be seen at Messrs. Davenport and Bridges, Cambridgeport, Mass., and at the office of the Railroad Journal, New York.

Plans, Specifications, and all information obtained on application to the Subscriber, Inventor, and Patentee G. A. NICOLLS,

ja45 *Reading, Pa.*

IRON BRIDGES, BRIDGE & ROOF BOLTS, etc.—STARKS & PRUYN, of Albany, N. York, *having at great expense established a Manufactory* with every facility of Machinery, for manufacturing Iron Bridges, Bridge and Roof Bolts, together with all kinds of the larger sizes of Screw Bolts, Iron Railings, Steam Boilers, and every description of wrought iron work, are prepared to furnish to order, on the shortest notice, any of the above branches, of the very best of American Refined Iron, and at the lowest rates.

During the past year S. & P. have furnished several Iron Bridges for the Erie Canal, Albany Basin, etc., and a large amount of Railroad Bridge Bolts, all of which have given the most perfect satisfaction.

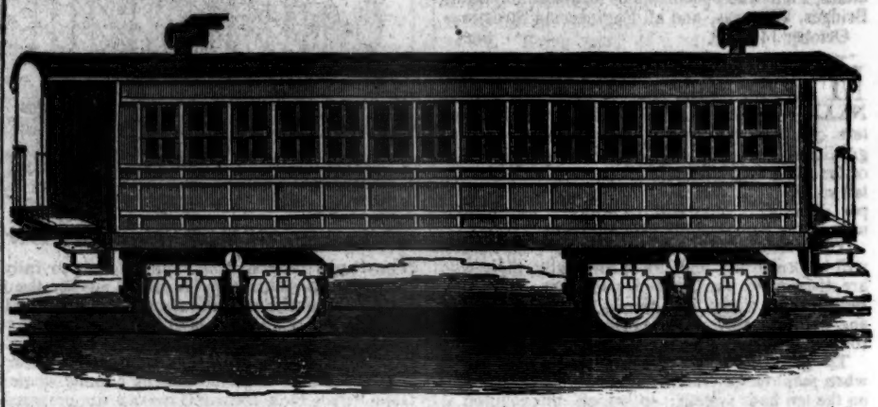
They are permitted to refer to the following gentlemen:

Charles Cook, Nelson J. Beach, Jacob Hinds,	Canal Commissioners of the State of New York.
Willard Smith Esq.,	Engineer of the Bridges for the Albany Basin.
Messrs. Stone & Harris	Railroad Bridge Builders, Springfield, Mass.
Mr. Wm. Howe,	
Mr. S. Whipple,	Engineer & Bridge Builder, Utica, N. Y.

January 1, 1849. 1y*

DAVENPORT & BRIDGES'

CAR WORKS, CAMBRIDGEPORT, MASS.



Manufacture to Order, Passenger and Freight Cars of every description, and of the most improved pattern; also furnish Snow Ploughs and Chilled Wheels of any pattern and size. Forged Axles, Springs, Boxes and Bolts for Cars at the lowest prices.

All orders punctually executed and forwarded to any part of the country.

Our Works are within fifteen minutes ride from State street, Boston—Omnibuses pass every fifteen minutes. 10*tf*

THE SUBSCRIBERS ARE PREPARED TO execute orders at their Phœnix Works for Railroad Iron of any required pattern, equal in quality and finish to the best imported.

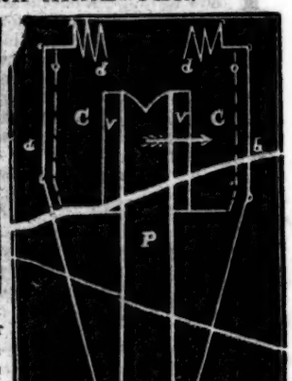
REEVES, BUCK & CO., Philadelphia.
ROBERT NICHOLS, Agent,
26tf No. 79 Water St., New York.

RAILROAD IRON, PIG IRON, ETC.

600 Tons of T Rail 60 lbs. per yard.
25 Tons of 2¼ by ½ Flat Bars.
25 Tons of 2½ by 9-16 Flat Bars.
100 Tons No. 1 Gartshrorie.
100 Tons Welsh Forge Pigs.

For Sale by A. & G. RALSTON & CO. No. 4 So. Front St., *Philadelphia*

FRENCH AND BAIRD'S PATENT SPARK ARRESTER.



TO THOSE INTERESTED IN Railroads, Railroad Directors and Managers are respectfully invited to examine an improved Spark-Arrester recently patented by the undersigned.

Our improved Spark Arresters have been extensively used during the last year on both passenger & freight engines, and have been brought to such a state of perfection that no annoyance from sparks or dust from the chimney of engines on which they are used is experienced.

These Arresters are constructed on an entirely different principle from any heretofore offered to the public. The form is such that a rotary motion is imparted to the heated air smoke and sparks passing through the chimney, and by the centrifugal force thus acquired by the sparks and dust they are separated from the smoke and steam, and thrown into an outer chamber of the chimney through openings near its top, from whence they fall by their own *gravity to the bottom of this chamber; the smoke and steam passing* off at the top of the chimney, through a capacious and unobstructed passage, thus arresting the sparks without impairing the power of the engine by diminishing the draught or activity of the fire in the furnace.

These chimneys and arresters are simple, durable and neat in appearance. They are now in use on the following roads, to the managers and other officers of which we are at liberty to refer those who may desire to purchase or obtain further information in regard to their merits

R. L. Stevens, President Camden and Amboy Railroad Company; Richard Peters, Superintendant Georgia Railroad, Augusta, Ga.; G. A. Nicolls, Superintendant Philadelphia, Reading and Pottsville Railroad, Reading, Pa.; W. E. Morris, President Philadelphia, Germantown and Norristown Railroad Company, Philadelphia; E. B. Dudley, President W. and R. Railroad Company, Wilmington, N. C.; Col. James Gadsden, President S. C. and C. Railroad Company, Charleston, S. C.; W. C. Walker, Agent Vicksburgh and Jackson Railroad, Vicksburgh, Miss.; R. S. Van Rensselaer, Engineer and Sup't Hartford and New Haven Railroad; W. R. M'Kee, Sup't Lexington and Ohio Railroad, Lexington, Ky.; T. L. Smith, Sup't New Jersey Railroad Trans. Co.; J. Elliott, Sup't Motive Power Philadelphia and Wilmington Railroad, Wilmington, Del.; J. O. Sterns, Sup't Elizabethtown and Somerville Railroad; R. R. Cuyler, President Central Railroad Company, Savannah, Ga.; J. D. Gray, Sup't Macon Railroad, Macon, Ga.; J. H. Cleveland, Sup't Southern Railroad, Monroe, Mich.; M. F. Chittenden, Sup't M. P. Central Railroad, Detroit, Mich; G. B. Fisk, President Long Island Railroad, Brooklyn.

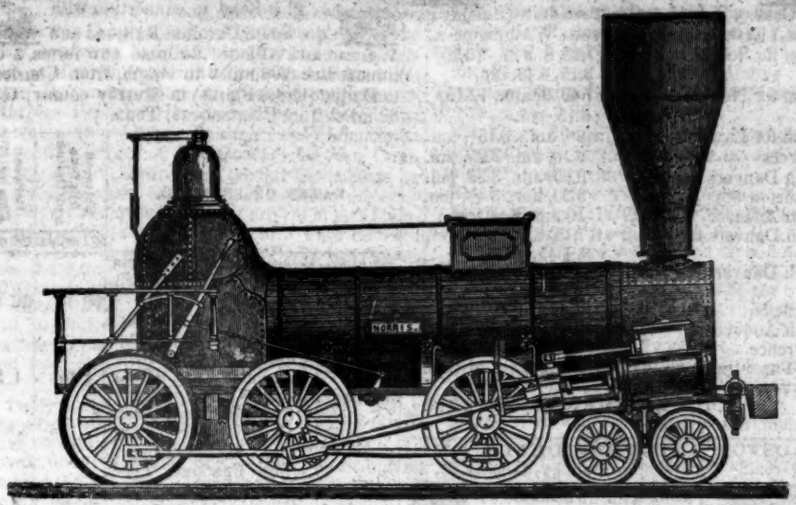
Orders for these Chimneys and Arresters, addressed to the subscribers, care Messrs. Baldwin & Whitney, of this city, will be promptly executed. FRENCH & BAIRD.

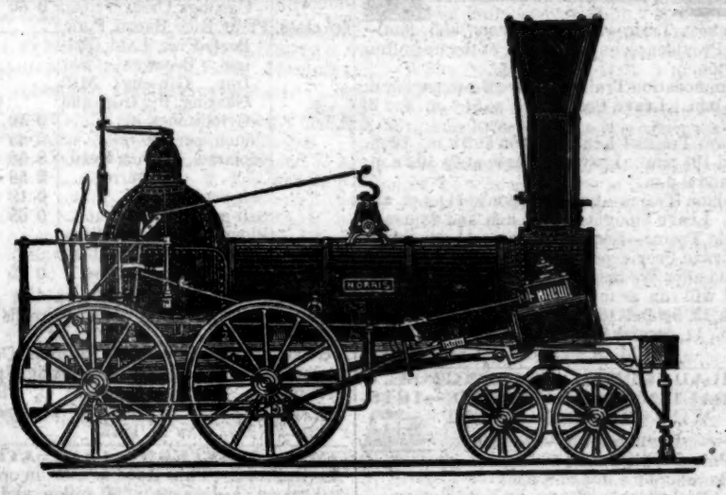
N. B.—The subscribers will dispose of single rights, or rights for one or more States, on reasonable terms. *Philadelphia, Pa., April 6, 1844.*

☞ The letters in the figures refer to the article given in the *Journal* of June, 1844. ja45

NORRIS' LOCOMOTIVE WORKS.

BUSHHILL, SCHUYLKILL SIXTH-ST., PHILADELPHIA,





THE UNDERSIGNED Manufacture to order Locomotive Steam Engines of any plan or size. Their shops being enlarged, and their arrangements considerably extended to facilitate the speedy execution of work in this branch, they can offer to Railway Companies unusunl advantages for prompt delivery of Machinery of superior workmanship and finish.

Connected with the Locomotive business, they are also prepared to furnish, at short notice, Chilled Wheels for Cars of superior quality.

Wrought Iron Tyres made of any required size—the exact diameter of the Wheel Centre, being given, the Tires are made to fit on same without the necessity of turning out inside.

Iron and Brass castings, Axles, etc., fitted up complete with Trucks or otherwise.

NORRIS' BROTHERS.

MACHINE WORKS OF ROGERS, Ketchum & Grosvenor, Patterson, N. J. The undersigned receive orders for the following articles, manufactured by them of the most superior description in every particular. Their works being extensive and the number of hands employed beinglarge, they are enabled to execute both large and small orders with promptness and despatch.

Railroad Work.

Locomotive steam engines and tenders; Driving and other locomotive wheels, axles, springs & flange tires; car wheels of cast iron, from a variety of patterns, and chills; car wheels of cast iron with wrought tires; axles of best American refined iron; springs; boxes and bolts for cars.

Cotton, Wool and Flax Machinery

of all descriptions and of the most improved patterns, style and workmanship.

Mill gearing and Millwright work generally; hydraulic and other presses; press screws; callenders; lathes and tools of all kinds; iron and brass castings of all descriptions.

ROGERS, KETCHUM & GROSVENOR,
Paterson, N. J., or 60 Wall street, N. York.

T. & C. WASON, Manufacturers of every style of Freight and Baggage Cars.—Forty rods east of the depot, Springfield, Mass.

Running parts in sets complete, Wheels, Axles, or any part of cars furnished and fitted up at short notice and in the best manner.

N.B. Particular attention paid to the manufacture of the *most improved* Freight Cars. We refer to the New Haven, Hartford and Springfield; Connecticut River; Harlem; Housatonic, and Western, Mass., Railroads, where our cars are now in constant use.

Dec.25, 1847.—1y.

RAILROAD IRON.

3000 TONS, ABOUT 60 LBS. PR lineal yard—deliverable early in the Spring, and of undoubted quality, can be contracted for at a low rate. For sale by

DAVIS, BROOKS & CO.,
68 Broad street.

New York, Sept. 16. 1848, 39tf

Also on hand—**1000** Tons best quality Rails.

CHILLED RAILROAD WHEELS.—THE undersigned are now prepared to manufacture their Improved Corrugated Car Wheels, or Wheels with any form of Spokes or Disks, by a new process which prevents all strain on the metal, such as is is produced in all other chilled wheels, by the manner of casting and cooling. By this new method of manufacture, the bubs of all kinds of wheels may be made whole—that is, without dividing them into sections—thus rendering the expense of banding unnecessary; and the wheels subjected to this process will be much stronger than those of the same size and weight, when made in the ordinary way.

A. WHITNEY & SON,
Willow St. below 13th,
Nov. 10, 1847. [tf.] Philadelphia, Penna.

PATENT RAILROAD, SHIP AND BOAT Spikes. The Troy Iron and Nail Factory keeps constantly for sale a very extensive assortment of Wrought Spikes and Nails, from 3 to 10 inches, manufactured by the subscriber's Patent Machinery, which after five years' successful operation, and now almost universal use in the United States (as well as England, where the subscriber obtained a patent) are found superior to any ever offered in market.

Railroad companies may be supplied with Spikes having countersink heads suitable to holes in iron rails, to any amount and on short notice. Almost all the railroads now in progress in the United States are fastened with Spikes made at the above named factory—for which purpose they are found invalua ble, as their adhesion is more than double any com mon spikes made by the hammer.

All orders directed to the Agent, Troy, N. York will be punctually attended to.

HENRY BURDEN, *Agent*

Spikes are kept for sale, at Factory Prices, by & J. Townsend, Albany, and the principal Iron mer chants in Albany and Troy; J. I. Brower, 222 Water St., New York; A. M. Jones, Philadelphia; T. Jar viers, Baltimore; Degrand & Smith, Boston.

*** Railroad Companies would do well to forward their orders as early as practicable, as the subscriber is desirous of extending the manufcturing so as to keep pace with the daily increasing demand.

ja45

TO LOCOMOTIVE AND MARINE ENgine Boiler Builders. Pascal Iron Works, Philadelphia. Welded Wrought Iron Flues, suitable for Locomotives, Marine and other Steam Engine Boilers, from 2 to 5 inches in diameter. Also, Pipes for Gas, Steam and other purposes; extra strong Tube for Hydraulic Presses; Hollow Pistons for Pumps of Steam Engines, etc. Manufactured and for sale by

MORRIS TASKER & MORRIS,
Warehouse S. E. corner 3d and Walnut Sts., Philadelphia 1t

TO RAILROAD COMPANIES AND MAN ufacturers of railroad Machinery. The subscribers have for sale Am. and English bar iron, of al. sizes; English blister, cast, shear and spring steel; Juniata rods; car axles, made of double refined iron; sheet and boiler iron, cut to pattern; tiers for locomotive engines, and other railroad carriage wheels, made from common and double refined B. O. iron; the latter a very superior article. The tires are made by Messrs. Baldwin & Whitney, locomotive engine manufacturers of this city. Orders addressed to them, or to us, will be promptly executed.

When the exact diameter of the wheel is stated in the order, a fit to those wheels is guaranteed, saving to the purchaser the expense of turning them out inside.

THOMAS & EDMUND GEORGE,
a45 N. E. cor. 12th and Market sts., Philad., Pa.

LAWRENCE'S ROSENDALE HYDRAulic Cement. This cement is warranted equal to any manufactured in this country, and has been pronounced superior to Francis' "Roman." Its value for Aqueducts, Locks, Bridges, Flooms and all Masonry exposed to dampness, is well known, as it sets immediately under water, and increases in solidity for years.

For sale in lots to suit purchasers, in tight papered barrels, by JOHN W. LAWRENCE,
142 Front street, New York.

☞ Orders for the above will be received and promptly attended to at this office. 39 1y

MATTEWAN MACHINE WORKS.

THE MATTEWAN COMPANY HAVE added to their Machine Works, an extensive LOCOMOTIVE ENGINE department, and are prepared to execute orders for *Locomotive Engines* of every size and pattern—also, *Tenders, Wheels, Axles,* and other Railroad Machinery, to which they ask the attention of those who wish such articles, before they purchase elsewhere.

STATIONARY ENGINES, BOILERS, ETC., Of any required size or pattern, arranged for driving *Cotton, Woollen,* or *other* Mills, can be had on favorable terms, and at short notice.

COTTON AND WOOLLEN MACHINERY, Of every description, embodying all the modern improvements, second in quality to none in this or any other country, made to order.

MILL GEARING,

Of every description, may be had at short notice, as this company has probably the most extensive assortment of patterns in this line, in any section of the country, and are constantly adding to them.

TOOLS.

Turning Lathes, Slabbing, Planing, Cutting, and *Drilling* Machines, of the most approved patterns, together with all other tools required in machine shops, may be had at the Mattewan Company's Shops, Fishkill Landing, or at

39 Pine Street, New York.
WM. B. LEONARD, *Agent.*

RAILROAD IRON.

THE NEW JERSEY IRON CO.'S WORKS, at Boonton, are now in full operation, and can execute orders for Railroad Bars of any required pattern, equal in quality to any made in this country. Apply to DUDLEY B. FULLER, Ag't
139 Greenwich Street.
New York, October 25, 1848. tf

EASTERN RAILROAD, WINTER ARRAGEment. On and after MONNDAY, Oct. 2, 1848. Trains will leave Eastern Railroad Depot, Eastern Avenue, Commercial street, Boston, daily, (Sundays excepted,)

For Lynn, 7, 9 11½, a.m. 12, 2½, 3½, 4½, 6, a.m.
Salem, 7, 9, 11½, a.m. 12, 2½, 3½, 4½, 6, p.m.
Manchester, 9, a.m. 3½, p.m.
Gloucester, 9, a.m. 3½, p.m.
Newburyport, 7, 11½, a.m. 2½, 4½, p.m.
Portsmouth, 7 a.m., 2½ 4½ p.m.
Portland, Me. 7, a.m., 2½, p.m.

And for Boston,

From Portland, 7½, a.m., 3, p.m.
Portsmouth, 7, 9½*, a.m. 5½*, p.m.
Newburyport, 7½, 10½*, a.m., 2, 6*, p.m.
Gloucester, 7½, a.m., 3½, p.m.
Manchester, 8, a.m., 3½, p.m.
Salem, 7½, 8½*, 9*, 10½, 11·40*, a.m., 2½, 3*, 4½*, 7*, p.m.
Lynn, 7½, 8½*, 9½*, 10½, 11·55*, a.m., 2½, 3½*, 4½*, 7½*, prm.

☞ On Monday, Wednesday, and Friday, a train will leave Boston for Lynn and Salem, at 7 o'clock, p.m.

On Tuesday, Thursday, and Saturday, a train will leave EAST BOSTON for Lynn and Salem, at 10½ o'clock, p.m.

*Or on their arrival from the East.

MARBLEHEAD BRANCH.

Trains leave
Marblehead for Salem, 7½, 8½, 10, 11·25, a.m. 2, 4½, 6½, p.m.
Salem for Marblehead, 7½, 9½, 10½, a.m., 12½, 3½, 5½, 6½, p.m.

GLOUCETER BRANCH.

Trains leave
Salem for Manchester at 9½, a.m., 4½, p.m.
Salem for Gloucester at 9½, a.m., 4½, p.m.
Trains leave
Gloucester for Salem at 7½, a.m., 3½, p.m.
Manchester for Salem at 8, a.m. 3½, p.m.

Freight Trin each way daily, Office 1 Merchants' Row, Boston:
Feb. 3 JOHN KINSMAN, Superintendent.

ESSEX RAILROAD.—SALEM TO LAWRENCE, through Danvers, New Mills, North Danvers, Middleton, and North Andover. On and after Monday, October 2, 1848, trains leave daily (Sunday excepted,) Eastern Railroad Depot, Washington-st.

Salem for South Danvers at		7.45, 9, a m., 12.45. 3.15, 6.45, pm.
Salem for North Danvers at		7.45, 9, am., 12.45. 3.15, pm.
Salem for Lawrence,		9*, am., 3.15*, pm.
Danvers	"	9.10, am., 3.25, pm.
North Danvers	"	9.20, am., 3.35, pm.
Middleton	"	9.30, am., 3.45, pm.
North Andover	"	10 am., 4.20, pm.
South Danvers for Salem at		7.15, 8.45, 11.30, am. 2, 5.45, pm.
North Danvers	"	8.20, 11.10, am., 1.40. 5.40, pm.
Middleton	"	11, am., 5.30, pm.
North Andover	"	10.35, am., 5.05, pm.
Lawrence	"	10.30*, am., 5*, pm.

* These trains will not stop at Frye's Mills nor Grove-st,

JOHN KINSMAN, Superintendent.
Salem, Oct. 2, 1848.

BOSTON AND PROVIDENCE RAILroad. On and after Monday, October 2d, the Trains will run as follows:

Steamboat Train—Leaves Boston at 5 p.m.—Leaves Providence, on the arrival of the train from Stonington.

Accommodation Trains—Leave Boston at 8 a·m. and 3½ p.m. Leave Providence at 8½ a.m. and 3½ p.m.

Dedham Trains—Leave Boston at 9 a.m., 12 m., 3, 6, and 10½ p.m. Leave Dedham at 7½ 10½ a.m., 1½, 4½, and 9 p.m.

Stoughton Trains—Leave Boston at 11½ a.m. and 4½ p.m. Leave Stoughton at 8½ a.m. and 2½ p.m.

Freight Trains—Leave Boston at 11 a.m. and 6 p.m. Leave Providence at 4 a.m, and 7 40 a.m.

On and after Wednesday, Nov. 1, the DEDHAM TRAIN will run as follows: Leave Boston at 9 a.m., 12 m., 3, 5½ and 10½ p.m. Leave Dedham at 8 10½, a.m., 1½, 4½ and 9 p.m.

WM. RAYMOND LEE, *Sup't.*

PHILADELPHIA, WILMINGTON & BALTIMORE RAILROAD.—1848. WINTER ARRANGEMENT.

December 4th.—Fare $4.

Leave Philadelphia 8 a.m. and 4 p.m.
Leave Baltimore 9 a.m and 8 p.m.
Sunday—Philadelphia only at 4 p.m.
" Baltimore only at 8 p.m.

Trains stop at way stations. A second class car run with morning line only.

CHARLESTON, S. C.

Through tickets Philadelphia to Charleston, $20.

Connecting lines to Charleston leave Philadelphia at 4 p.m. daily—leave Baltimore at 11½ p.m. daily

PITTSBURG AND WHEELING.

Through ticket, Philadelphia to Pittsburg, $12.
" " Wheeling, 13.

All through tickets only sold at office, Philad.

WILMINGTON ACCOMMODATION.

Leaves Philadelphia at 1½ and 4 p.m.
Leaves Wilmington at 8 a.m. and 4 p.m.
N.B.—Extra baggage charged for.

I. R. TRIMBLE, Gen. Supt.

SOUTH CAROLINA RAILROAD.—A Passenger Train runs daily from Charleston on the arrival of the boats from Wilmington, N. C., in connection with trains on the Georgia, and Western and Atlantic Railroads—and by stage lines and steamers connects with the Montgomery and West Point, and the Tuscumbia Railroad in N. Alabama.

Fare through from Charleston to Montgomery daily $26 50
Fare through from Charleston to Huntsville, Decatur and Tuscumbia 22 00

The South Carolina Railroad Co. engage to receive merchandize consigned to their order, and to forward the same to any point on their road; and to the different stations on the Georgia and Western and Atlantic railroad; and to Montgomery, Ala., by the West Point and Montgomery Railroad.

JOHN KING, Jr, *Agent.*
y35

GEORGIA RAILROAD. FROM AUGUSTA to ATLANTA—171 MILES. AND WESTERN AND ATLANTIC RAILROAD FROM ATLANTA TO DALTON, 100 MILES.

This Road in connection with the South Carolina Railroad and Western and Atlantic Railroad now forms a continuous line, 408 miles in length, from Charleston to Dalton (Cross Plains) in Murray county, Ga.—32 miles from Chattanooga, Tenn.

RATES OF FREIGHT.		Between Augusta and Dalton. 271 miles.	Between Charleston, and Dalton. 408 miles.
1st class.	Boxes of Hats, Bonnets, and Furnature, per cubic foot.....	$0 18	$0 28
2d class.	Boxes and Bales of Dry Goods, Sadlery, Glass, Paints, Drugs and Confectionary, per 100 lbs.	1 00	1 50
3d class.	Sugar, Coffee, Liquor, Bagging, Rope, Cotton Yarns, Tobacco, Leather, Hides, Copper, Tin, Feathers, Sheet Iron, Hollow Ware, Castings, Crockery, etc.	0 60	0 85
4th class.	Flour, Rice, Bacon, Pork, Beef, Fish, Lard, Tallow, Beeswax, Bar Iron, Ginseng, Mill Gearing, Pig Iron, and Grindstones, etc.....	0 40	0 65
	Cotton, per 100 lbs.....	0 45	0 70
	Molasses, per hogshead.	8 50	13 50
	" " barrel....	2 50	4 2
	Salt per bushel.....	0 18	
	Salt per Liverpool sack..	0 65	
	Ploughs, Corn Shellers, Cultivators, Straw Cutters, Wheelbarrows...	0 75	1 50

German or other emigrants, in lots of 20 or more, will be carried over the above roads at 2 cents per mile.

Goods consigned to S. C. Railroad Co. will be forwarded free of commissions. Freight payable at Dalton.

F. C. ARMS,
Sup't. of Transportation.
Augusta, Ga., July 15, 1847. 44*1y

THE WESTERN AND ATLANTIC Railroad.—This Road is now in operation to Oothcaloga, a distance of 80 miles, and connects daily (Sundays excepted) with the Georgia Rail road.

From Kingston, on this road, there is a tri-weekly line of stages, which leave on the arrival of the cars on Tuesday, Thursday and Saturday, for Warrenton, Huntsville, Decatur and Tuscumbia, Alabama, and Memphis, Tennessee.

On the same days, the stages leave Oothcaloga for Chattanooga, Jasper, Murfreesborough, Knoxville and Nashville, Tennessee.

This is the most expeditious route from the east to any of these places.

CHAS. F. M. GARNETT,
Chief Engineer.
Atlanta, Georgia, April 16th, 1846 1y1

CENTRAL RAILROAD—FROM SAVANnah to Macon. Distance 190 miles.

This Road is open for the transportation of Passengers and Freight. Rates of Passage, $8 00. Freight—

On weight goods generally... 50 cts. per hundred.
On measurement goods..... 13 cts. per cubic ft.
On brls. wet (except molasses and oil)..... $1 50 per barrel.
On brls. dry (except lime)... 80 cts. per barrel.
On iron in pigs or bars, castings for mills, and unboxed machinery..... 40 cts. per hundred
On hhds. and pipes of liquor, not over 120 gallons.....$5 00 per hhd.
On molasses and oil.....$6 00 per hhd.

Goods addressed to F. WINTER, Agent, forwarded free of commission. THOMAS PURSE,
y40 Gen'l. Sup't. Transportation.

BALTIMORE AND OHIO RAILROAD. MAIN STEM. The Train carrying the Great Western Mail leaves Baltimore every morning at 7½ and Cumberland at 8 o'clock, passing Ellicott's Mills, Frederick, Harpers Ferry, Martinsburgh and Hancock, connecting daily each way with—the Washington Trains at the Relay House seven miles from Baltimore, with the Winchester Trains at Harpers Ferry — with the various railroad and steamboat lines between Baltimore and Philadelphia and with the lines of Post Coaches between Cumberland and Wheeling and the fine Steamboats on the Monongahela Slack Water between Brownsville and Pittsburgh. Time of arrival at both Cumberland and Baltimore 5½ P. M. Fare between those points $7, and 4 cents per mile for less distances. Fare through to Wheeling $11 and time about 36 hours, to Pittsburgh $10, and time about 32 hours. Through tickets from Philadelphia to Wheeling $13, to Pittsburgh $12. Extra train daily except Sundays from Baltimore to Frederick at 4 P. M., and from Frederick to Baltimore at 8 A. M.

WASHINGTON BRANCH.

Daily trains at 9 A. M. and 5 P. M. and 12 at night from Baltimore and at 6 A. M. and 5½ P. M from Washington, connecting daily with the lines North, South and West, at Baltimore, Washington and the Relay house. Fare $1 60 through between Baltimore and Washington, in either direction, 4 cents per mile for intermediate distances. s13y1

BALTIMORE AND SUSQUEHANNA Railroad.—Reduction of Fare. Morning and Afternoon Trains between Baltimore and York.—The Passenger trains run daily, except Sunday, as follows:

Leaves Baltimore at	9 a.m. and	3½ p.m.
Arrives at	9 a.m. and	6½ p.m.
Leaves York at	5 a.m. and	3 p.m.
Arrives at	12½ p.m. and	8 p.m.
Leaves York for Columbia at	1½ p.m. and	8 a.m.
Leaves Columbia for York at	8 a.m. and	2 p.m.

FARE.

Fare to York	$1 50
" Wrightsville	2 00
" Columbia	2 12½

Way points in proportion.

PITTSBURG, GETTYSBURG AND HARRISBURG.

Through tickets to Pittsburg via stage to Harrisburg $9
Or via Lancaster by railroad 10
Through tickets to Harrisburg or Gettysburg .. 3

In connection with the afternoon train at 3½ o'clock, a horse car is run to Green Spring and Owing's Mill, arriving at the Mills at ..... 5½ p.m.
Returning, leaves Owing's Mills at ..... 7 a.m.

D. C. H. BORDLEY, *Sup't.*
31 1y Ticket Office, 63 North st.

PHILADELPHIA AND READING RAILROAD.—Passenger Train Arrangement for 1848.

A Passenger Train will leave Philadelphia and Pottsville daily, except Sundays, at 9 o'clock A. M.

The Train from Philadelphia arrives at Reading at 12 18 M.

The Train from Pottsville arrives at Reading at 10 43 A. M.

Fares.	Miles.	No. 1.	No. 2.
Between Phila. and Pottsville,	92	$3·50 and	$3·00
" " Reading,	58	2·25 and	1·90
" Pottsville "	34	1·40 and	1·20

Five minutes allowed at Reading; and three at other way stations.

Passenger Depot in Philadelphia corner of Broad and Vine streets. 8tf

JAMES HERRON, *Civil Engineer,*
OF THE UNITED STATES NAVY YARD,
PENSACOLA, FLORIDA.,
PATENTEE OF THE
HERRON RAILWAY TRACK.

MODELS of this Track, on the most improved plans, may be seen at the Engineer's Office of the New York and Erie Railroad.

NEW YORK & HARLEM RAILROAD CO.—Summer Arrangement.—On and after Tuesday, June 1st, 1847, the cars will run as follows, until further notice. Up trains will leave the City Hall for—

Yorkville, Harlem and Morrisana at 6, 8 and 11 a.m., 2, 2 30, 5 and 7 p.m.

For Morrisiana, Fordham, Williams' Bridge, Tuckahoe, Hart's Corner and White Plains, 7 and 10 a.m., 4 and 5 30 p.m.

For White Plains, Pleasantville, Newcastle, Mechanicsville and Croton Falls, 7 a.m. and 4 p.m. Freight train at 1 p.m.

Returning to New York, will leave—

Morrisiana and Harlem, 7, 8 20 and 9 a.m., 1, 3, 4 30, 6, 6 28 and 8 p.m.

Fordham, 8 08 and 9 15 a.m., 1 20 and 6 15 p.m.

Williams Bridge, 8 and 9 08 a.m., 1 10, 6 08 p.m.

Tuckahoe, 7 38 and 8 25 a.m., 12 55 and 5 52 p.m.

White Plains, 7 10 and 8 35 a.m., 12 50, 5 35 p.m.

Pleasantville, 8 15 a.m. and 5 15 p.m.

Newcastle, 8 a.m. and 5 p.m.

Mechanicsville, 7 48 a.m. and 4. 48 p.m.

Croton Falls, 7 30 a.m. and 4 30 p.m. Freight train at 10 a.m.

Freight train will leave 32d street for Croton Falls and intermediate places, 4 a.m and City Hall 1 p.m.

Returning, leave Croton Falls 10 a.m. and 9½ p.m.

ON SUNDAYS, the trains will run as follows:

Leave City Hall for Croton Falls, 7 a.m, 4 p.m.

Croton Falls for City Hall, 7 30 a.m., 4 30 p.m.

Leave City Hall for White Plains and intermediate places, 7 and 10 a.m. 4 and 5 30 p.m.

White Plains for City Hall, 7 10 and 8 35 a.m., 12 30 and 5 35 p.m.

Extra trains will be run to Harlem, Fordham and Williams Bridge on Sunday, when the weather is fine.

The trains to and from Croton Falls will not stop on N. York island, except at Broome st. and 32d st.

A car will preceed each train 10 minutes to take up passengers in the city.

Fare from New York to Croton Falls and Somers $1, to Mechanicsville 87½c., to Newcastle 75c., to Pleasantville 62½c. to White Plains 50c. 25tf

NORWICH AND WORCESTER RAILROAD. Winter Arrangement.—1848.

Accommodation Trains daily, (Sundays excepted.)
Leave Norwich, at 6 a. m., 12 m. and 2½ p. m.
Leave Worcester, at 6½ and 10 a. m., and 4½ p. m. connecting with the trains of the Boston and Worcester and Providence and Worcester railroads.

New York & Boston Line. Railroad & Steamers. Leave New York and Boston, daily, Sundays excepted, at 5 p.m.—At New York from pier No. 1 N. River.—At Boston from corner Lincoln and Beach streets, opposite United States Hotel. The steamboat train stops only at Framingham, Worcester, Danielsonville and Norwich.

Freight Trains leave Norwich and Worcester daily, Sundays excepted.—From Worcester at 6½ a. m., from Norwich at 7 a.m.

☞ *Fares are Less when paid for Tickets than when paid in the Cars.* ☜
32 1y S. H. P. LEE, Jr., Sup't.

BOSTON AND MAINE RAILROAD.

Winter Arrangement.
Commencing Nov. 13, 1848.

Trains leave Boston as follows, viz: For Portland at 7 A.M. and 2½ P.M.
Great Falls at 7 a.m., 2½ and 3½ p.m.
Haverhill at 7 and 11½ a.m., 2½, 3½ and 5 p.m.
Lawrence, at 7, 9, 11½ a.m., 2½, 3½, 5, 6 p.m.
Reading 7, 9 & 11½ a.m., 2½, 3½, 5, 6, 7½ & 10 p.m

Trains leave for Boston as follows, viz: From Portland at 7½ a.m., and 3 p.m.
Great Falls at 6½ and 9½ a.m., and 4½ p.m.
Haverhill at 7, 8½ and 11 a.m., 3 and 6½ p.m.
Lawrence at 6½, 7½, 8½, 11½ a.m., 12½, 3½, 6½, p.m.
Reading at 6½, 7, 7½, 9½, 11½ a.m., 1½, 3½, 7½, 9, p.m.

MEDFORD BRANCH TRAINS.

From Medford at 6½, 8, 10½, a.m., 2, 4, 6, 9 p.m.
From Boston at 7½, 9½ a. m., 12½ 2½, 5½, 6½, 10 p.m.

The Depot in Boston is on Haymarket Square.
CHAS. MINOT, *Super't.*
Boston, Nov. 7, 1848.

NEW YORK ANDERIE RAILROAD LINE. SUMMER ARRANGEMENT. For passengers, twice each way daily, (except Sunday,) leave New York from the foot of Duane St. at 7 o'clock, A. M. and at 4 o'clock, P. M. by steamboat, for Piermont, thence by cars to Ramapo, Monroe, Chester, Goshen, Middletown, Otisville, and the intermediate stations.

The return trains for New York will leave Otisville at 6 30, A. M. and 4 15, P. M.; Middletown at 7 A. M. and 4 40, P. M.; Goshen at 7 22, A. M. and 5 3, P. M.; Chester at 7 35, A. M. and 5 18, P. M.

Fare between New York and Otisville, $1 50; way-fare in proportion.

FOR MILK—Leave Otisville at 5½ o'clock, morning and evening.

FOR FREIGHT—The barges "Samuel Marsh and "Henry Suydam, Jr." will leave New York (from the foot of Duane St.) at 5 o'clock, P. M. daily (except Sundays.)

No freight will be received in New York after 5 o'clock, P. M.

Freight for New York will be taken by the trains eaving Otisville at 10½ o'clock, A. M.; Middletown at 11½, A. M.; Goshen at 12½, P. M.; Chester at 1 o'clock, P. M., etc., etc.

For farther particulars, apply to J. F. CLARKSON, Agent, corner of Duane and West Sts., New York, or to S. S. POST, Superintendent Transportation, Piermont.
24tf H. C. SEYMOUR, Sup't.

LITTLE MIAMI RAILROAD COMPANY Fall and Winter Arrangement, 1847. On and after Monday, September 20th, until further notice, a Passenger train will run as follows:

Leave Cincinnati daily at 9 A. M., for Milford, Foster's Crossing, Deerfield, Morrow, Fort Ancient, Freeport, Waynesville, Spring Valley, Xenia, Yellow Springs, and Springfield. Returning, will leave Springfield at 4½ a.m. Upward train arrives at Springfield at 2½ p.m. Downward train arrive at Cincinnati at 10½ a.m.

Freight trains will run each way daily.

Messrs. Neil, Moore & Co. are running the following stage lines in connection with the road:

A daily line from Xenia to Columbus and Wheeling, carrying the great Eastern mail.

Daily lines from Springfield to Columbus, Zanesville and Wheeling. Also to Urbana and Bellefontaine.

A line of Hacks runs daily in connection with the train between Deerfield and Lebanon.

Passengers leaving for New York and Boston, arrive at Sandusky city via Urbana, Bellefontaine & the Mad River and Lake Erie railroad, in 27 hours, including several hours' sleep at Bellefontaine. To the same point via Columbus, Delaware, Mansfield and the Mansfield and Sandusky city railroad, is 32 hours. Distance from Cincinnati to Springfield by railroad ..... 84 miles.
From Springfield to Bellefontaine by stage, over a good Summer road ..... 32 "
From Bellefontaine to Sandusky city by railroad ..... 102 "

FARE—From Cincinnati to Lebanon			$1 00
"	"	" Xenia	1 50
"	"	" Springfield	2 00
"	"	" Columbus	4 00
"	"	" Sundusky city	7 00

The Passenger trains runs in connection with Strader & Gorman's line of Mail Packets to Louisville.

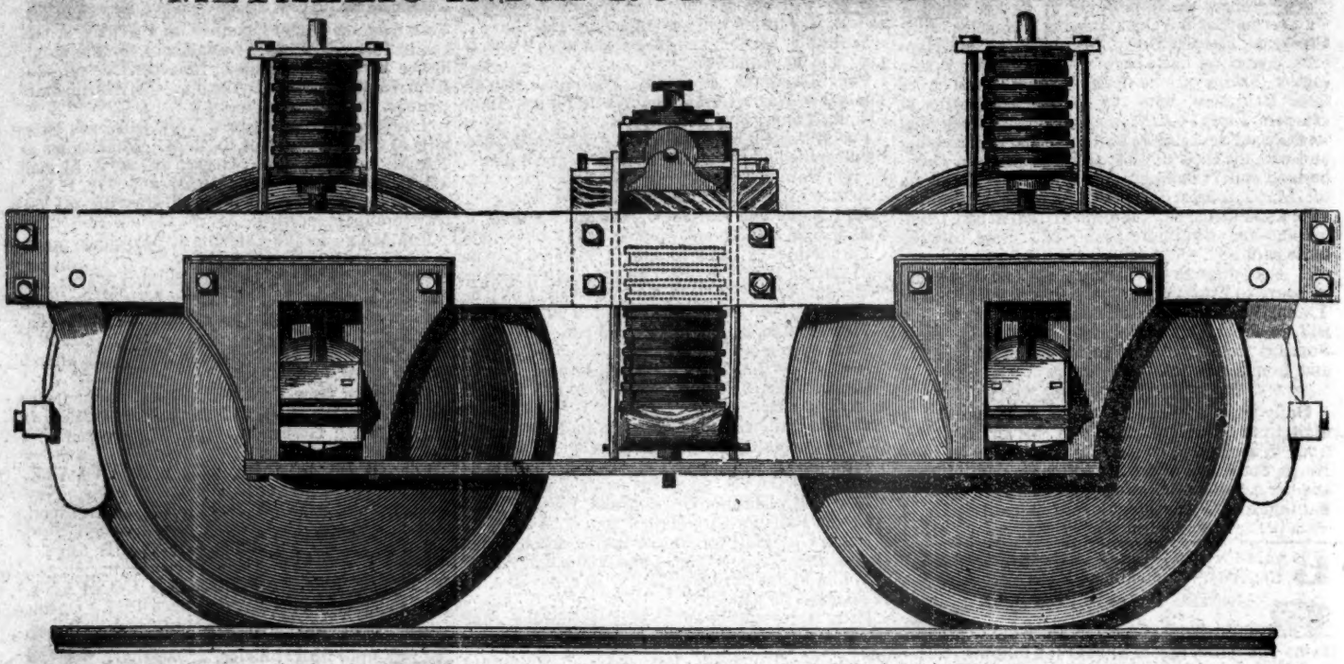
Tickets can be procured at the Broadway Hotel, Dennison House, or at the Depot of the Company on East Front street.

Further information and through tickets for the Stage lines, may be procured at P. Campbell, Agent on Front street, near Broadway.

The company will not be responsible for baggage beyond 50 dollars in value, unless the same is returned to the conductor or agent, and freight paid at of a passage for every $500 in value over that amount.
47tf W H. CLEMENT, *Sup't*

FOWLER M. RAY'S

METALLIC INDIA RUBBER CAR SPRINGS.



THE NEW ENGLAND CAR COMPANY have introduced these Springs, and they are now in operation on every Railroad terminating in Boston, and several others in New England and the Middle States. Their qualities are well understood, or may be readily ascertained by every person interested to know them. They require no recommendation from the Company. The only known compound of India Rubber good for anything for this purpose, is the Vulcanized India Rubber, invented by Charles Goodyear, of New Haven, and the application of it, and the form in which it is used, were invented by F. M. Ray, of New York. The right to manufacture and sell the substance itself for the purpose of Railroad Carriage Springs, as well as the form and application of it, are held exclusively by the New England Car Company. No other company, or individual, has any right to sell or use it for such purpose, or has attempted so to use it in this country.

The New England Car Company guarantee the right to use the article they sell for Railroad Carriage Springs only against all adverse rights, whether under patents or otherwise: and all persons and corporations are cautioned against a similar use of the article, when purchased of any other parties.

The Springs they sell are all manufactured in a uniform manner, and under the immediate inspection of their own Agent, and have been proved and known to answer the purpose. None have been manufactured in this country, or imported from abroad, beside their own, which would at all answer the purpose; and if any such should be produced, it cannot be used for Car Springs, while Goodyear's patents, and the rights of the New England Car Company under them, remain in force.

The New England Car Company are now prepared to answer orders for all that may be called for, on reasonable notice, and uniform and equitable terms. They invite the most careful examination and the severest scrutiny into the merits of their Springs, wherever they have applied them. And if after such examination, your Company should judge it for their interest to adopt them, the N. E. Car Company would respectfully invite the patronage which they think they deserve, and are confident of receiving at your hands.

EDWARD CRANE, *Agent*,
Office 99 State street,

Orders may also be left with WM. RIDER & BROTHERS, No. 59 Liberty street, New York, or with F. M. RAY, *Agent*,
100 Broadway, N. Y.

The following article, from the pen of Mr. HALE, the president of the Boston and Worcester Railroad, expresses his opinion of this important improvement, as published in the Boston Daily Advertiser of June 7, 1848. He says:

"Of the numerous uses to which the wonderful elasticity and durability of India Rubber renders this material applicable, we are hardly aware of one in which it has been more successful than in forming springs for railroad cars. We have had occasion to observe, for some months past, its application to this use, on one of the passenger cars on the Newton special train of the Boston and Worcester railroad. It is there used, not only for the springs on which the car rests, but for the springs attached to the draw bar at each end of the car, to prevent any jar on the sudden advancement or interruption of the motion of the car. For both these purposes it appears to be admirably adapted, and we do not learn, that during the period in which it has been used, any defect in it has been discovered. It renders the movements of the car extremely easy, and protects it more effectually, we think, than any other spring which we have ever seen in use, from a very harsh or unpleasant motion, either vertical or horizontal. It is simple in its form and application, extremely light, and little liable to get out of repair. During the period of some months, in which we have seen the springs in operation, there is no apparent wear or diminution of their efficacy."

The above statement of Mr. Hale agrees with my own observation in all particulars.

WM. PARKER, Supt. B. & W. R. R.
June 8, 1848.

I fully concur in the foregoing statement, from practical observation of its use for the last 5 months, on the Boston and Worcester railroad corporation cars.

D. N. PICKERING, Jr.,
Supt. Car Building, B. & W. R. R.
Boston, June 10, 1848.

The New England Car Company have introduced their Vulcanized India Rubber Car Springs on the road with which we are respectively connected, and we fully concur with Mr. Hale in the above opinion of their character and properties.

DAVENPORT & BRIDGES, Car Builders.
BRADLEY & RICE, Car Builders.
Boston, June, 1848.

PIG AND BLOOM IRON.—THE SUBSCRIbers are agents for the sale of numerous brands of Charcoal and Anthracite Pig Iron, suitable for Machinery, Railroad Wheels, Chains, Hollowware, etc. Also several brands of the best Puddling Iron. Juniatta Blooms suitable for Wire, Boiler Plate, Axe Iron, Shovels, etc. The attention of those engaged in the manufacture of Iron is solicited by

A. WRIGHT & NEPHEW,
12tf Vine St. Wharf, Philadelphia.

BACK VOLUMES OF THE RAILROAD JOURNAL for sale at the office No. 98 Nassau street.

LAP-WELDED WROUGHT IRON TUBES for Tubular Boilers, from 1¼ to 15 inches diameter, and any length not exceeding 17 feet—manufactured by the Caledonian Tube Company, Glasgow, and for sale by

IRVING VAN WART,
12 Platt street, New York.
JOB CUTLER, Patentee.

These Tubes are extensively used by the British Government, and by the principal Engineers and Steam Marine and Railway Companies in the Kingdom. 28tf

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.
Jan. 20, 1849.

AMERICAN RAILROAD JOURNAL.
PUBLISHED BY J. H. SCHULTZ & CO.
NOS. 9 & 10 PRIME'S BUILDINGS,
(THIRD FLOOR,)
54 WALL STREET,
NEW YORK CITY.

TERMS.—Five Dollars a year, *in advance*.

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One page, single insertion	8 00
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One square " "	1 00
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☞ LETTERS and COMMUNICATIONS for this Journal may be directed to the *Editor*,
HENRY V. POOR, 54 WALL ST.